



CLIMATE ACTION 4 CITIES

SOLUTIONS & RECOMMENDATIONS

UN HABITAT
FOR A BETTER URBAN FUTURE



TABLE OF CONTENTS

About the #ClimateAction4Cities Campaign..... 6

#ZEROCARBON4CITIES SOLUTIONS 7

- 1.1 Accelerate Transformational Change Towards Sustainable Urban Mobility
- 1.2 Application of the Fukuoka Method on 3 Landfill Sites in Ethiopia
- 1.3 Berbera Urban Regeneration: Green Park

Hot Cities: Climate Adaptation in Challenging Environments in the MENA Region (UTC #8)..... 11

- 1.4 Deploying Educational Activities Through the Dubai Future Foundation
- 1.5 Facilitating Capacity Building through Knowledge Exchange
- 1.6 Providing Support through the Middle East Cities Centre
- 1.7 Strengthening Urban Design Practices as Tools for Climate Adaptation
- 1.8 Climate Adaptation Strategies: GCC Arabia, UAE, Bahrain, Qatar
- 1.9 Hybrid Eco-Urban Design Roadmap
- 1.10 Urban Circularity through Greening Strategies
- 1.11 Green Riyadh Initiative

A Localization Model for Climate Action: Delivering the New Urban Agenda and the SDGs in the Hunter, NSW Region (UTC #17)..... 14

- 1.12 Social Change for Carbon Reduction through Technical Innovation
- 1.13 Smart City Strategy and the Role of Technology in the Transition from Fossil Fuels
- 1.14 Coalition to Develop a Voluntary Local Review
- 1.15 Linking the Local Voluntary Review with Higher Levels of City Authorities

#RESILIENCE4CITIES SOLUTIONS 16

- 2.1 #Housing2030: Effective Policies for Affordable Housing
- 2.2 Climate Resilient Honiara - Making Communities Less Vulnerable to Climate Change and Disaster Risks
- 2.3 City Resilience Profiling Tool
- 2.4 Delivery of Durable Solutions for Climate-Induced Displacement
- 2.5 Development of City-Wide City Resilience Strategies
- 2.6 Enhancing the Resilience in Lao PDR
- 2.7 Fiji Resilient Informal Settlements
- 2.8 LNK Center for Resiliency and Conservation
- 2.9 Nairobi River Regeneration Initiative
- 2.10 URBAN95
- 2.11 Multiagency Support in Mainstreaming Resource Efficiency in the Housing, Buildings, and Construction Sector
- 2.12 Integrating Indigenous Knowledge and Technology for Safer Habitat in Pakistan

<i>Post-Blast Reconstruction of Beirut: Climate-Heritage Planning to Build Back Better (UTC #2).....</i>	<i>28</i>
2.13 New Urban Planning for Post Disaster Situations	
2.14 Rebuilding from Disaster through New Energy Efficient Methods	
2.15 Restoration of the Port of Beirut	
2.16 Spreading Importance of Cultural and Tangible Heritage in Rebuilding	
2.17 Revitalization of the Cultural Life and of the Creative Industries	
2.18 People and Community Centered “Bottom-Up” Participatory Approaches	
2.19 National and International Engagement in Recovery Process	
<i>Critical Urban Infrastructure: Identifying and Assessing Smart and Green Solutions for Efficient Disaster-Risk Resilience (UTC #4).....</i>	<i>32</i>
2.20 Nature Based Solutions Focused on Water Resilience	
2.21 Engineered Infrastructure and Innovation to Address Water Management	
2.22 Rejuvenating Sustainable and Traditional Water Resilient Practices	
<i>Female Approaches to Build Climate Resilience (UTC #7).....</i>	<i>35</i>
2.23 Networks of Women for Knowledge Exchange and Positive Climate Action	
<i>Tackling a Double Threat: Children at the Front and Center of Urban Fragility and Climate Change (UTC #9)</i>	<i>36</i>
2.24 Increased Participation of Children in Climate Related Policies	
2.25 Investment in SDG Focused Education for Children	
2.26 Accelerated Investment in Child and Youth Responsive Climate Measures	
2.27 Warning System and Waste Bank Designed by Children and Youth in Indonesia	
2.28 Training Children and Youth in Urban Resilience Planning in the Philippines	
2.29 Child Protection Measures in Disaster Risk Reduction Plans for Bangladesh	
2.30 Educating Children and Youth on the Importance of Digital Assets as a Tool for Advocacy in Mongolia	
2.31 Construction and Running of Green Centre in Jordan	
<i>Legislación Urbana: Herramienta de Acción Climática (UTC #11)</i>	<i>39</i>
2.32 Free Legal Assistance from Public Defenders	
2.33 Using Sports to Promote Public Spaces	
2.34 Promote Training Based on Urban Development, Human Rights and Climate Change	
2.35 Points of Action for Urban Legislation in Latin America	
<i>Climate Action for Resilient Communities by, and for, Women (UTC #12).....</i>	<i>41</i>
2.36 Intersectional Gender Lens Integrated into Urban Planning	
2.37 Diverse gender representation from different socio-economic backgrounds in decision-making	
2.38 Gender Segregated Transport and Gender-Sensitive Infrastructure	
2.39 Decentralized and Diverse Representation in Decision Making	
2.40 Reclaiming Public Space Through Impromptu Gatherings	

2.41 Reducing Consumption and Waste Through Environmentally Conscious Alternatives	
2.42 Maintenance of Kochi Metro Railway Stations by Women	
2.43 Gender Lens for Inclusive Participation	
<i>Countless Futures: People Will Live Here (UTC #13)</i>	<i>44</i>
2.44 Parkyng the Future	
2.45 Housing Diversity	
2.46 Good Business for a Sustainable Growth	
<i>Planning the African Metropolis for Climate Resilience (UTC #14)</i>	<i>46</i>
2.47 Initiative African Sustainable Cities – EPA Euromediterranée	
2.48 Creation of a Department to Implement Two Projects Related to Climate Change - City of Kinshasa, Republican Democratie of Congo	
2.49 The French Status of « Société à Mission » - Réalités HUB5 and Realité Africa	
2.50 Ciclia: Cities and climate in sub-saharian Africa – French Development Agency	
2.51 PCET (Territorial Climate and Energy Plan) of Dakar – City of Dakar, Senegal	
2.52 Mwayei Ô Afrika	
2.53 Habitat Professional Forum HPF Covid -19 RoadMap	
2.54 New Systemic Framework for Planning Metro Policies	
2.55 King Elanda Project	
<i>University and City for Climate Action (UTC #15)</i>	<i>51</i>
2.56 Legislation and Academia for Inclusive Urban Planning in La Plata	
2.57 Reinventing our Town Project - Crisol High-School	
2.58 Smart Digitization of Public Citizen Services	
2.59 Rain Schools - Isla Urbana	
2.60 Urban Laboratory of Loja	
<i>Mass Housing and Climate Change: Challenges and Solutions (UTC #19)</i>	<i>54</i>
2.61 Regeneration and Good Planning of Mass Housing	
2.62 Renovation of Grand Park in Bordeaux	
2.63 Adaptation of Existing Mass Housing in Rio de Janeiro	
<i>Implementation of Urban Climate Change Action Plan: Kuala Lumpur (Phase 7.0). 56</i>	
2.64 Inclusive Climate Action Plans in Kuala Lumpur for Transformative Actions	
2.65 City Work Tool to Bring Stakeholders Together	
<i>Climate Adaptation, Heritage, and Public Space: An Exploration of New Urbanities for a Resilient Future (UTC TBC).....</i>	<i>58</i>
2.66 Climate Heritage Network	
2.67 Biodiversity Through Nature Based Solutions	
<i>#NATURE4CITIES SOLUTIONS.....</i>	<i>60</i>
3.1 Chengdu Park City Indicator System	

- 3.2 Donghu Greenway
- 3.3 EcoZones: Catalyzing Transformations from the Neighborhood Scale
- 3.4 Knowledge Sharing Platform of Nature-Based Solutions (NBS)

Public Spaces as Anchors of Social Resilience and Climate Action: The Role of Participation (UTC #1) 65

- 3.5 The Siyakhana food garden in Bez valley park
- 3.6 The Picasso Food Forest in Italy
- 3.7 Support for Informal Settlements in High-Risk Areas
- 3.8 Tree and Shade Plans & Policies
- 3.9 Wastewater Collection to Create Green Belt
- 3.10 The City-Wide Public Space Assessment Tool
- 3.11 Using Minecraft in Implementing the Block-by-Block methodology
- 3.12 Public Spaces for Improved Air Quality and Carbon Sequestration
- 3.13 Public Spaces for Building Resilience
- 3.14 Three Lined Streets as Models for Promoting Accessibility
- 3.15 Allotment Gardens for Traditional Urban Agriculture
- 3.16 Green and Blue Spaces on City-Wide and Regional Scale
- 3.17 Convertible Spaces for Flooding Retention
- 3.18 Informal Economies for Post Disaster Relief
- 3.19 Pilot Projects for Under Resourced Green Spaces
- 3.20 Urban Agriculture on Sidewalks

Urbanism: The Missing Link to Responding to Climate Change (UTC #5) 69

- 3.21 Think Tank that is Directly Connected to National and Subnational Policy Makers
- 3.22 30 by 30 and 50 by 50
- 3.23 Timelines to Move Fast and Decarbonize Transportation
- 3.24 Using Language to Build Partnerships for Just Transition
- 3.25 New Creative Finance Strategies
- 3.26 New Taxation Policies to Stop Subsidizing Homeownership

A Local Green Deal (UTC #10) 72

- 3.27 Mission Statement 2030 Framework with the Citizens of Mannheim
- 3.28 Green Zone: Green Belt in Mannheim
- 3.29 Green Tech Startup Centers and Sustainable Education Programs
- 3.30 Plastic Strategy
- 3.31 Citizen Participation
- 3.32 Mannheim Mobility Master Plan 2035
- 3.33 Climate Protection Action Plan 2030
- 3.34 Open space concept 2030
- 3.35 Creative Testing on Site
- 3.36 Climate Protection and Consumption-Free Spaces
- 3.37 Innovative and Sustainable Urban Development
- 3.38 Tree Talks - A Strong Forest for Effective Climate Protection

3.39 BUGA 23 as part of the Local Green Deal

3.40 The City Cycling Project to Implement the Local Green Deal

Adapting Cities for Climate Resilience: Amplifying Pakistan’s Efforts and Young Voices to Echo at COP 26 (UTC #21) 78

3.41 Rain Water Harvesting in Urban Areas

Wamama Tunauwezo 6: Women Have Power (UTC #22)..... 79

3.42 Spaces for Women to Impact Climate Change

3.43 Collective Community mapping to address vulnerability and empower authorities

About the #ClimateAction4Cities Campaign

One of the main UN goals in 2021 has been to strengthen climate action both in terms of building a global coalition for carbon neutrality by 2050 and on adaptation and resilience. The #ClimateAction4Cities Campaign called for urgent action to inspire and mobilize multiple actors in cities and communities to promote climate solutions. It focused on the immediate need for cities and national governments to reduce urban-based carbon emissions, build resilience to climate change particularly for the urban poor and build back better after the COVID-19 pandemic.

Striving for efficient and carbon neutral cities and a sustainable future, the campaign engaged a variety of UN-Habitat partners through several platforms, in particular the World Urban Campaign to deliver effective scalable solutions and innovations to address the climate change challenges. The campaign has inspired actions in cities and communities and has called for effective solutions. Focusing on **#GreenRecovery**, the actions taken highlight the low-carbon and nature-based solutions in building climate resilience of cities and communities through the three main themes:

#Zerocarbon4Cities <u>#Zerocarbon4Communities</u>	#Resilience4Cities <u>#Resilience4Communities</u>	#Nature4Cities <u>#Nature4Communities</u>
<ul style="list-style-type: none">- Low-carbon urban mobilities- Zero-carbon energies- Carbon neutral buildings and planning- Resource efficiency and waste-wise cities	<ul style="list-style-type: none">- Climate resilience urban pathways- Building climate resilience of the urban poor- Pandemic resilient cities- Resilience and disaster risk management	<ul style="list-style-type: none">- Nature-based solutions- Ecosystems services, blue-green networks- Greening public space- Biodiversity for places and cities

The campaign was meant to ‘supercharge ideas to solutions’ and take action in cities and communities to win the race of climate change. The solutions below display recommendations and impacts of actions worldwide in countries, cities and communities in becoming climate resilient and identifying successful pathways towards net zero emissions.

#ZEROCARBON4CITIES SOLUTIONS

With rapid growth, urban populations are increasingly being challenged by the impacts of climate change. Cities throughout the world produce energy by burning coal, oil, gas and emitting carbon as most human activity involves burning one of these fossil fuels. Since CO₂ emissions are predominantly city-based, they must be at the heart of climate action. Zero-carbon cities maintain optimal living conditions while eliminating environmental impact. Cities must collectively reduce emissions of greenhouse gases to zero and all practices that emit greenhouse gases must cease. A zero-carbon city is a renewable-energy-economy city. The cases below highlight some solutions and steps that have been taken on the road to A zero-carbon city that runs entirely on renewable energy with no carbon footprint.

The World Urban Campaign partners have defined climate action towards zero carbon in *The City We Need* as follows:

The City We Need is net zero emitting by 2050 and limits global warming to 1.5°C by cutting greenhouse gases emissions by 40 to 50 percent before 2030 from 2010 levels. It reduces emissions from transport, energy use and buildings, embraces retrofitting and ensures that new urban construction becomes fossil fuel free. It adopts affordable, robust low-carbon technologies and approaches, with efficient and locally relevant urban design strategies that minimize the carbon footprint of the cities.

The City We Need will adopt climate-proof planning, sets emissions reductions targets and strategies to reduce these emissions along with innovative urban design and mobility plans. It uses spatial planning and other decision support systems to support proactive and coordinated cross-cutting urban adaptation and mitigation across urban sectors. It lays emphasis on the preparation of actionable frameworks for better climate proof integrated urban development.

(SOLUTION 1.1) Accelerate Transformational Change Towards Sustainable Urban Mobility (SOLUTIONSplus)

Where: Global

Organization: Urban Electric Mobility Initiative

More INFO: <http://www.solutionsplus.eu/start-up-hub.html>

https://www.youtube.com/results?search_query=solutionsplus+e-course

<http://www.uemi.net>



DESCRIPTION:

SOLUTIONSplus brings together highly committed cities, industry, research, implementing organizations and finance partners to establish a global platform for shared, public and commercial e-mobility solutions to kick start the transition towards low-carbon urban mobility. The SOLUTIONSplus project enables transformational change towards sustainable urban mobility through innovative and integrated electric mobility solutions. To deliver this objective, the project boosts the development and implementation of electric vehicles, fosters the efficiency and innovative re-designing of operations, and supports the integration of different types of e-mobility in large urban areas. As such, the project sets up a global platform for shared, public and commercial e-mobility solutions. Through numerous synergistic projects, networks and strong technical experience, the project delivers on its highly ambitious goals. The overall objective is to make a substantial contribution to the uptake of innovative and green urban mobility solutions across the world, by facilitating dialogue and exchange, promoting successful policy, providing guidance and tailored advice to city officials, and fostering future cooperation on research, development and innovation.

(SOLUTION 1.2) Application of the Fukuoka Method on three Landfill Sites in Ethiopia

Where: Addis Ababa, Bahir Dar, Hawassa, in Ethiopia

Organization: UN-Habitat

More INFO: <https://www.facebook.com/UNHabitatEthiopia/>
<https://unhabitat.org/ethiopia>



DESCRIPTION:

Application of the Fukuoka method in landfill sites to reduce the GHG emissions and ensure safety for landfill workers. The Fukuoka method is a technology offering improved landfill sites simply and at low cost utilizing materials and methods readily available in developing countries to install leachate drainage pipes and gas vents, thereby enlarging the aerobic region in the landfill waste layers. It is called the Fukuoka method because it was jointly developed by Fukuoka University and Fukuoka City. It also minimizes impact on the environment surrounding the site because it promotes the degradation of landfilled waste, rapid landfill stabilization and leachate is drained promptly from the landfill. In addition, the volume of methane gas emitted by the landfill is reduced, contributing to efforts to prevent global warming. The Fukuoka method is one waste disposal technology that can be utilized in many locations around the world, but unlike anaerobic landfills collecting biogas, the interior of the landfill is maintained in an aerobic state as much as possible, specifically to promote rapid stabilization and environmental preservation.

(SOLUTION 1.3) Berbera Urban Regeneration: Green Park

Where: Berbera, Somaliland

Organization: UN-Habitat

More INFO: <https://www.facebook.com/UNHabitatEthiopia/>
<https://unhabitat.org/berbera-urban-development-project-launched-in-somaliland>



DESCRIPTION:

Berbera has a very dry climate, marked by high variability, low precipitation, very high temperatures, extreme weather events and strong dusty winds. There have been environmental degradation and habitat fragmentation because of deforestation, erosion, droughts and unsustainable agriculture, these have led to habitat loss. The European Union jointly with the Somaliland Ministry of Planning and National Development, the Municipality of Berbera and UN-Habitat has launched the Berbera Urban Development Project. The project will support inclusive and sustainable development of the coastal city through strengthening the capacity of the municipality in urban planning, improving the waste management system and stimulating employment and entrepreneurship for urban communities. During the signing ceremony, the European Union's Ambassador underscored the significance of this project in terms of improved decent work and business activity for the residents of Berbera with a particular focus on women, young people and those people living in the most vulnerable situations. The Project objective is to contribute to inclusive and sustainable urban development and economic growth in Berbera through improved waste management infrastructure and services. The intervention aims at bridging the gap between the urban poor and the local government, by strengthening inclusive governance, enabling the provision of improved services and creating related employment in Berbera.

Hot Cities: Climate Adaptation in Challenging Environments in the MENA Region (UTC #8)

Lead Organizer: ISOCARP Institute

Co-lead Organizers: [Middle East Cities Center](#)

Where: Middle East and North Africa Region, Global - Online

More INFO: <https://www.worldbank.org/en/region/mena/publication/global-economic-prospects-2017-mena-a-fragile-recovery>



DESCRIPTION:

(SOLUTION 1.4) Deploying Educational Activities Through the Dubai Future Foundation

Gathering a collection of best practices on climate adaptation in hot cities that would feed into the development of an educational course on the Future of Humanity with Dubai Future Foundation.

(SOLUTION 1.5) Facilitating Capacity Building through Knowledge Exchange

ISOCARP Institute will facilitate a productive knowledge exchange between interdisciplinary actors toward exploring solutions concerning climate adaptation in hot cities

(SOLUTION 1.6) Providing Support through the Middle East Cities Centre

Delivering content and communication support with local networks and connecting participants from around the world with industry practitioners, experts and decision makers within Dubai and across the MENA region.

(SOLUTION 1.7) Strengthening Urban Design Practices as Tools for Climate Adaptation

Strengthen the Urban Design Practices as a tool for Climate Adaptation by completing legislations, defining CO2 carbon footprints and cost implication, developing Eco-Urban Design R&D Unit, Pedestrianization and Phasing the development & Prioritize the Actions.

(SOLUTION 1.8) Climate Adaptation Strategies in GCC Arabia, UAE, Bahrain, Qatar

A strategic umbrella of plans, spatial strategies, impact assessments and local climate reports that begins to mitigate and define the way forward. This focuses on transitioning land use toward Transit Oriented Development to promote public transport and human based mobility.

(SOLUTION 1.9) Hybrid Eco-Urban Design Roadmap

Roadmap proposed for the MENA region based on retrofitting policies and guidelines under environmental typologies and definitions from zoning and permitted land uses, population and employment densities land use mix, utilities and engineering all the way to incentive policies, finance and implementation processes. Urban ecosystems are rapidly expanding throughout the world, but how urban growth affects the evolutionary ecology of species living in urban areas remains largely unknown. Urban ecology has advanced our understanding of how the development of cities and towns change environmental conditions and alter ecological processes and patterns. Solutions seek to understand how urbanization affects the evolution of populations, and how those evolutionary changes in turn influence the ecological dynamics of populations, communities, and ecosystems. Plans are aimed at advancing our understanding of the interplay between ecology and evolution of urban-dwelling organisms. The aim is to highlight the importance of integrating urban evolutionary ecology into urban planning, conservation practice, and public engagement.

(SOLUTION 1.10) Urban Circularity through Greening Strategies

The kingdom of Saudi Arabia has almost three climatic zones across. Climatic zones impact and is related to some of the urban design strategies going on across the region. One of the main challenges is adaptability to the natural conditions, from shade and humidity. Urban greening strategies have been implemented with almost 10 billion trees across the kingdom getting planted. Talks about equal planning has been going intensively across the valleys that scattered across the kingdom in the south, even in Riyadh. The royal

commission of Riyadh have started applying urban circularity in most of their strategic projects to rethink redesigning the flow of the resources. Another branding and attractive new trend across the kingdom of Saudi Arabia is humanization and pedestrianization. There are complete lists of projects that will be included in this inclusive master plan. Changing the way they work, the municipalities and the royal commissions across the kingdom have adapted this strategy to most of their projects.

(SOLUTION 1.11) Green Riyadh Initiative

A holistic solution that contains several strategic and city level projects. Initiatives come from decision makers such as the green Riyadh initiative that started so they are already involved in the climate related business. 10 billion trees have been planted for the coming years, but the target is 450,000 by 2030. The rate of greening has been increased by 16 times from previous projects such as the King Salman parks and even the internal neighborhoods that are being created across the city. 7.5 million trees are already in the process of getting planted across the city. The goal is also to transform the visual perception of the city, balancing and mitigating the climatic challenges that Riyadh has. Urban actions have started turning initiatives into reality.

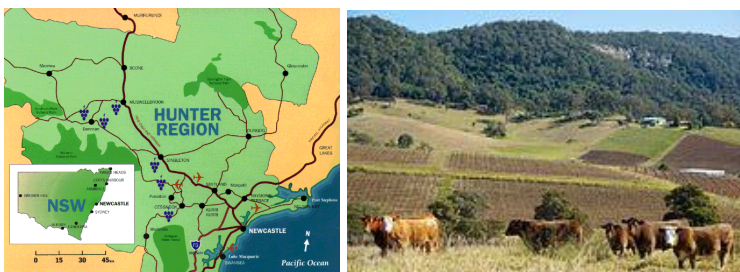
A Localization Model for Climate Action: Delivering the New Urban Agenda and the SDGs in the Hunter, NSW Region (UTC #17)

Lead Organizer: Compass Housing Services Co Ltd

Co-lead Organizers: Newcastle University & CIFAL

Where: Global – Online

More INFO: www.compasshousing.org



DESCRIPTION:

(SOLUTION 1.12) Social Change for Carbon Reduction through Technical Innovation

In the Hunter region, the project will address responsible consumption and production with the people and activities, paying particular attention to the development of a circular economy through technical innovation. The contribution of a circular approach to economic activity which seeks to minimize waste, maximize reuse and develop new consumption patterns.

(SOLUTION 1.13) Smart City Strategy and the Role of Technology in the Transition from Fossil Fuels

In the Hunter region, the project seeks to build a just transition from carbon intensive industries and the critical role that new technologies play in the process. Specific approaches include developing the zero-carbon city through a Smart City strategy. The specific challenge for the Hunter region is a reliance on a major coal exporting industry which provides major employment opportunities, both in the mining of coal and transport and shipping infrastructure that accompanies it.

(SOLUTION 1.14) Coalition to Develop a Voluntary Local Review

Compass Housing Services Co Ltd together with Newcastle University and CIFAL held their UTC to build on the platform of the Hunter Region SDG Taskforce and develop an overall approach to the localization agenda. The primary outcome for the event was the development of partnerships and a platform to produce a Voluntary Local Review. The concern was to understand and develop the interaction between local, national and international climate action which is a key focus of the program components. The campus tested the Hunter Regional SDG Taskforce model as an exemplar of local partnership that addresses the NUA and SDGs to exert local influence but also to participate in national and international debates. The further development of the model will be of global interest in the task of NUA and SDG localization. The campus addressed the objective of making the City of Newcastle and the surrounding Hunter region a regenerative, inclusive, safe, and healthy community led by effective planning and governance for climate change mitigation.

(SOLUTION 1.15) Linking the Local Voluntary Review with Higher Levels of City Authorities

Linking the VLR to multi-levels from the business community to government such as the state legislation, city authority, nine local authorities, larger public bodies like the water utility for the region, NGOs and charitable organizations providing services to women and children. The goal is to develop a comprehensive VLR that reports from every sector of society particularly against the 17 SDGs. It must be easy to collaborate with no formalities and barriers such as membership criteria's which can hinder progress of the participative model. With this sense of equality, no organization will be privileged whether it's the state authority, the city authority or a small local charity. One challenge is translating the high-level targets of the SDGs and the concerns of the NUA to things that small organizations can relate to and target in their own actions. This will be an important part of developing this localization agenda.

#RESILIENCE4CITIES SOLUTIONS

The capacity of cities to meet the needs of urban populations is currently being tested under the pandemic. To make cities more resilient, the transition towards greener and regenerative cities is becoming essential. In order to adequately tackle climate breakdown, urban planning needs to move beyond sustainability to incorporate regenerative development frameworks. Current systems in place are outdated and do not account for the exponential evolution and development of urbanities throughout the globe resulting in flawed paradigms of practice. The cases provided below present solutions and action plans with resilience and regenerative development and design in mind. There is an urgent need to recognize the city and its continuous transformation as a complex adaptive system.

The World Urban Campaign partners have defined climate action towards resilience in *The City We Need* as follows:

The City We Need is resilient. The City We Need develops strategies for coping, adapting and transforming with future shocks and stresses to its social, economic, and technical systems and infrastructures so as to maintain the basic structure, functions, systems, and identity. It builds the capacities of local stakeholders, individuals, and communities and governing systems continuously and to assess risks, absorb, recover and learn from acute shocks and chronic stresses both natural and man-made. It addresses the COVID-19 pandemic in conjunction with the climate crisis, adopting 'green' recovery plans and measures to help people to adapt and survive to both crises affecting health, wellbeing and livelihoods, particularly for vulnerable populations.

The City We Need is regenerative. It restores and replenishes energy, water, food systems, air and ecosystems. It is energy and resource efficient, low-carbon, and increasingly reliant on renewable energy sources. It replenishes the resources it consumes and recycles and reuses waste. It manages water, land, and energy in a coordinated manner and in harmony with its hinterlands. It supports ecosystem restoration and city-regional food systems, including urban and peri-urban food production and community-based agriculture. It is endowed with multifunctional, adaptable infrastructure that supports local biodiversity while providing public space that improves quality of life.

(SOLUTION 2.1) #Housing2030: Effective Policies for Affordable Housing

Where: UNECE region

Organization: UN-Habitat

Intergovernmental Organization (UN)

More INFO: <https://www.housing2030.org/>

<https://www.housing2030.org/podcasts>

<https://www.youtube.com/watch?v=klIiYa21TJg&t=500s>

https://www.youtube.com/watch?v=Wumi6JaoPtY&feature=emb_title



DESCRIPTION:

The project is based on a research study jointly undertaken by UNECE, Housing Europe and UN-Habitat. It has produced a handbook that brings together useful housing policy tools to promote more affordable, inclusive and climate-neutral housing through the identification, exchange and dissemination of best practices in relation to land, environmental sustainability, finance and governance and regulation as they relate to promoting housing affordability. Several podcasts were also developed to communicate the findings of the research. Three of them focus on how environmental and energy standards can be leveraged to increase affordability, inclusivity and sustainability of housing. The project is also developing an online repository of good practices and tools.

(SOLUTION 2.2) Climate Resilient Honiara - Making Communities Less Vulnerable to Climate Change and Disaster Risks

Where: Honiara, Solomon Islands

Organization: UN-Habitat

Intergovernmental Organization (UN)

More INFO: <https://spark.adobe.com/page/nfzgLP0deEEwD/>

<https://unhabitat.org/fiji>



DESCRIPTION:

Solomon Islands is one of the world's fastest urbanizing countries. The capital, Honiara, located on the northwestern coast of Guadalcanal, is the major center of economic activity and as such, attracts increasing numbers of youth and adults from other islands seeking employment. With a topographically difficult terrain and inadequate urban infrastructure, the rugged hill areas are facing increased risk of landslides and valley floors are experiencing regular flood events due to higher frequency and intensity of extreme rainfall. Particularly at risk are the residents of informal communities. The overarching goal of this project is to enhance the resilience of the city and its inhabitants to current and future climate impacts and natural disasters, putting a particular focus on pro-poor adaptation actions that involve and benefit the most vulnerable communities in the city, such as youths, women, girls, the elderly, and people with disabilities. The project engages across all spatial scales with resilience actions and capacity building at city, ward, and local community levels. Important outcomes of this multi-level approach are improved institutional arrangements and working relationships between all stakeholders involved.

(SOLUTION 2.3) City Resilience Profiling Tool

Where: Maputo (Mozambique), Dakar (Senegal), Port Vila (Vanuatu), Asunción (Paraguay), Yakutsk (Russia), Barcelona (Spain), Teresina (Brazil), Santa Ana (Costa Rica)

Organization: UN-Habitat

More INFO: <https://urbanresiliencehub.org/wp-content/uploads/2018/10/Climate-Change-enhancer-Small-Pages.pdf>
<https://www.youtube.com/watch?v=BsacBJpbIPQ>



DESCRIPTION:

The City Resilience Profiling Tool (CRPT), developed by UN-Habitat, is a leading methodology for resilience building in cities and has a strong climate action focus. The CRPT identifies resilience trends, vulnerabilities, synergies, and interlinkages within the urban system that become the basis for prioritized actions. The CRPT's resilience analysis is comprehensive, covering the entire urban system in its measurement of vulnerabilities, and potential hazards while also considering governance issues. The CRPT provides a holistic approach to tackle climate action, combining climate-related hazards through a cross-sectoral analysis of urban physical, organizational, functional and social environment. To build urban climate resilience, it is important to understand the challenges that a changing climate pose to the city's environmental, economic and social systems and from this understanding, outline the mitigation and adaptation plans, and actions for resilience. The CRPT implementation allows evidence-based data knowledge, Identifying climate change challenges in the city, climate change impacts in cities.

(SOLUTION 2.4) Delivery of Durable Solutions for Climate-Induced Displacement

Where: Jigjiga city, Adadle town, Qoloji IDPs settlement, all in Somali Region of Ethiopia

Organization: UN-Habitat

Intergovernmental Organization (UN)

More INFO: <https://www.facebook.com/UNHabitatEthiopia/>
<https://unhabitat.org/ethiopia>



DESCRIPTION:

Qoloji, located in the Somali Region of Ethiopia, is the largest of the many settlements hosting internally displaced communities in the country. In 2020-2021, UN-Habitat was funded by Swiss Agency for Development and Cooperation (SDC) to develop the Qoloji Spatial Profile, which focused on establishing the existing conditions, identifying challenges and opportunities, developing the scenarios, and outlining recommendations for a durable settlement. This spatial profile is part of a wider set of project initiatives that examine how the socio-economic development of the area can be enhanced holistically to benefit both IDP and host communities living there. To design interventions of that nature, it is critical to begin with comprehending the existing situation. This is important given that the Somali Region is a historically marginalized part of Ethiopia, with high poverty levels and poorly developed infrastructure alongside decades of displacement. A strong focus upon durable solutions are key foundations to shifting the agenda and providing a base from which sustainable and concrete interventions can begin to take place. The broad intention of a spatial profile is to support this process. Its aim is to prepare a multi-scalar and multi-dimensional set of maps and supporting narrative which serve as a basis for informing further study and decision making in the area.

(SOLUTION 2.5) Development of City-Wide City Resilience Strategies

Where: Addis Ababa, Dire Dawa, Adama, Ethiopia

Organization: UN-Habitat

Intergovernmental Organization (UN)

More INFO: <https://www.facebook.com/UNHabitatEthiopia/>

<https://unhabitat.org/ethiopia>



DESCRIPTION:

Priorities emerging from the application of the CityRAP tool are embedded in the City Resilience Framework as a tool for budgeting public projects that endure the climate change resilience of each city. The CityRAP tool is used for training city managers and municipal technicians in small to intermediate sized cities in sub-Saharan Africa. It enables communities to understand and plan actions aimed at reducing risk and building resilience through the development of a Resilience Framework for Action. It is a step-by-step participatory resilience planning methodology that includes a set of training exercises and activities targeting municipal authorities, communities and local stakeholders. The implementation of the tool lasts approximately two to three months that are divided into four phases, as described below. A team of external trainers kicks-off the process and supports it throughout each phase, at different levels- sometimes directly on-site and at other times by being available as a remote resource. A small group of at least three people should be trained to lead the process at the city level, hereafter referred as the Municipal Focal Points. They play a very important role as they lead the CityRAP Tool roll-out process, thus collecting data, supporting data analysis, facilitating discussions, ensuring effective communication with partners/stakeholders, actively engaging with communities through participatory approach, and drafting the City RFA.

(SOLUTION 2.6) Enhancing the Resilience in Lao PDR

Where: Eight districts of the southern provinces of Attapeu, Sekong, and Saravane (Salavan) in Laos PDR.

Organization: UN-Habitat

Intergovernmental Organization (UN)

More INFO: <https://spark.adobe.com/page/jSMWQUig7L1DO/>
<https://unhabitat.org/lao-people%E2%80%99s-democratic-republic>



DESCRIPTION:

Climate change is already causing economic loss and affecting the livelihoods of many people in the Lao People's Democratic Republic (Lao PDR). The country is one of the most vulnerable in the world to climate change, extreme weather events and rainfall irregularity, which is impacting physical infrastructure, health and food security. This is exacerbated due to its high dependence on natural resources and low adaptive capacity. Lao PDR is urgently exploring ways to build its resilience by enhancing its adaptation efforts across sectors and concrete steps are being made. A project totaling US\$ 4.5 million funded by the Adaptation Fund and implemented by UN-Habitat is enhancing climate and disaster resilience across 189 of the most vulnerable human settlements in eight districts of the southern provinces of Attapeu, Sekong, and Saravane (Salavan), by increasing sustainable access to basic infrastructure systems and services, as well as emphasizing resilience to storms, floods, droughts, landslides, and disease outbreaks. The southern urban settlement of Pheerkeo is also affected by floods on an annual basis.

(SOLUTION 2.7) Fiji Resilient Informal Settlements

Where: Lautoka, Sigatoka, Nadi, Lami in Fiji

Organization: UN-Habitat

Intergovernmental Organization (UN)

More INFO: <https://spark.adobe.com/page/4cyN86xFKwXLC/>

<https://unhabitat.org/fiji>



DESCRIPTION:

Fiji, located in the Pacific Ocean's cyclone belt, experiences frequent cyclones and with them damaging winds, rain and storm surge. Being mountainous in its interior, Fiji's cities and towns are mainly located on the coast and along rivers and as a result are particularly exposed to cyclones, storm surges, coastal and riverine erosion, landslides and already occurring sea level rise. Informal settlement residents in towns and cities are, particularly at risk. In addition to climate change having an impact on the living environment of many informal settlement communities, it also poses a risk to existing livelihood practices. The overall objective of the project is to increase the resilience of informal urban settlements that are highly vulnerable to climate change and disaster risks. The project aims to work with vulnerable urban communities to conduct vulnerability assessments for the participating settlements and to produce actions plans and strategies for implementing climate adaptation actions within communities.

(SOLUTION 2.8) LNK Center for Resiliency and Conservation

Where: Lincoln, USA

Organization: The Joselyn Institute for Sustainable Communities Professional organization

More INFO: <https://joslyninstitute.org/initiatives/lincoln-public-market/>
<https://www.youtube.com/watch?v=a0cgATzvz1c>



DESCRIPTION:

Lincoln Public Market will present programs for farmers on regenerative agriculture and carbon capture, the foregoing use of chemicals and benefits of organic farming, and ways of mitigating the effects of flooding and drought. Both Lincoln Public Market and EcoStore will divert thousands of tons of food and C&D waste from public landfills, removing hazardous materials from the waste cycle. Shortened materials and food supply chains will help air quality and lower emissions while mitigating waste. Partnership for electric transport of foods and materials will reduce emissions. The Center will be powered by a 100% renewable microgrid. A wide range of long-established partnerships with building contractors, DIYers, farmers, food wholesalers, NGOs and other food providers, institutional kitchens, restaurants and grocers, food processors and distributors, artists, financial and business advisors, as well as university and city officials and personnel make LNK Center a dynamic, vibrant, and transparent enterprise. Grass-roots residents have been involved in the planning of both Lincoln Public Market and EcoStore, and the continued participation of these neighbors and other residents will be not only encouraged but vital.

(SOLUTION 2.9) Nairobi River Regeneration Initiative

Where: Nairobi River, Nairobi

Organization: UN-Habitat

More INFO: <https://unhabitat.org/restoration-of-the-nairobi-river-system-to-kick-start-citywide-regeneration#:~:text=Nairobi%2C%2014%20July%202021%20%E2%80%93%20UN,in%20the%20Kenyan%20capital%20Nairobi.>



DESCRIPTION:

Nairobi River Regeneration Initiative (NRRI) is a joint flagship initiative of the Nairobi Metropolitan Services and UN-Habitat which aims to reclaim the Nairobi River as a shared public good/asset that supports a better urban and environmental performance for a better quality of life in the city. UN-Habitat will provide the technical expertise to restore the river system and prioritize the riverfront development. It provides opportunities for regenerating inner city neighborhoods such as the wider Eastlands area, supporting local economies, providing alternative connectivity through a network of green and public spaces and a safe network of walkways and bicycle paths, managing storm water, and creating water reservoirs and water parks.

(SOLUTION 2.10) URBAN95

Organization: Bernard van Leer Foundation

Where: Global

More INFO: <https://brainbuilding.org/programme-areas/urban95/>
<https://www.youtube.com/watch?v=MXMU2nC5WIo>



DESCRIPTION:

Urban95 is a global initiative that supports the healthy development of young children growing up in cities. Working together with city leaders, planners, designers, advocates and communities to bring a child-lens to every layer of city decision-making to improve access to quality services, sustainable mobility and vibrant public places. Goals are driven by the experiences of children across cities and communities.

(SOLUTION 2.11) Multiagency Support in Mainstreaming Resource Efficiency in the Housing, Buildings, and Construction Sector

Where: Burkina and Sri Lanka.

Organization: UN-Habitat

More INFO: <https://www.oneplanetnetwork.org/sdg12-resource-efficient-housing>



DESCRIPTION:

Joint initiative developed with UNEP and UNOPS through the One Planet Network. The project aims at equipping UN country teams with the necessary

tools and information to support governments in transforming their buildings and construction sector to be a resource-efficient, low carbon and climate-resilient sector; and to raise awareness and strengthen the capacity of national stakeholders on sustainable buildings and construction-related benefits and opportunities with an emphasis on material efficiency. As a result of this project, several normative guidelines (Development of Guidelines on Sustainable Building and Constructions, and the Housing Sustainability Certification Scheme) will be developed, as well as a toolkit to support the advocacy efforts of the teams.

(SOLUTION 2.12) Integrating Indigenous Knowledge and Technology for Safer Habitat in Pakistan

Where: Pakistan

Organization: World Habitat

More INFO: <https://world-habitat.org/world-habitat-awards/winners-and-finalists/integrating-indigenous-knowledge-and-technology-for-safer-habitat/>

Film: <https://www.youtube.com/watch?v=MHx7tOq5ypc>



DESCRIPTION:

One of the two initiatives that received the Habitat Awards Gold Medal for 2020 is spot on about the campaign. “Integrating indigenous knowledge and technology for safer habitat in Pakistan” utilizes a community-based planning and risk management approach, integrating local knowledge. The initiative strengthen resiliency in one of the most disaster-prone regions of the world by building on local knowledge and traditional construction techniques, bringing people at the center of the response and ensuring cultural sustainability and adequacy of housing solutions.

Post-Blast Reconstruction of Beirut: Climate-Heritage Planning to Build Back Better (UTC #2)

Lead Organizer: [International Council on Monuments and Sites \(ICOMOS\)](#)

Co-lead Organizers: [American University of Beirut \(AUB\)](#), FNAU

Where: Global – Online

More INFO: [https://13b76e8f-1939-4110-a894-](https://13b76e8f-1939-4110-a894-ee362591ba6b.usrfiles.com/ugd/13b76e_86dd3b6653854dc4a61cd37b4f5d93a0.pdf)

[ee362591ba6b.usrfiles.com/ugd/13b76e_86dd3b6653854dc4a61cd37b4f5d93a0.pdf](https://13b76e8f-1939-4110-a894-ee362591ba6b.usrfiles.com/ugd/13b76e_86dd3b6653854dc4a61cd37b4f5d93a0.pdf)



DESCRIPTION:

(SOLUTION 2.13) New Urban Planning for Post Disaster Situations

The reduction of artificialization and mineralization of soils and the promotion of their renaturation are crucial for a city facing a rise in temperature and a loss of biodiversity. An open ground ratio should be created, and the reuse of waste lands should be favored for any new construction to stop the spread of mineralization. This renaturation of urban spaces must be enacted by the creation of green corridors, mainly within the historic centre to curb the ‘heat island’ effect. Green public spaces and green corridors should be developed such as in the hitherto abandoned Mar Mikhail train station and on Fouad Boutros highway. This could be accompanied by an improved water drainage system to avoid floods and draughts characteristic of weather hazards and provide better access to water and adequate sanitation. Considered within the wider Lebanese context and the national energy sector must also be reformed to adopt renewable energies, reduce waste and improve the distribution network. The transportation sector must also be revamped by encouraging soft mobility (walking, cycling, public transportation) and limit the place of the car in the city.

(SOLUTION 2.14) Rebuilding from Disaster through New Energy Efficient Methods

The reconstruction of the city must consider the rise in temperature and must adapt the buildings to be energy efficient and energy saving. This could be done using biobased or reused construction materials, energy saving architecture and thermal renovation of existing buildings. The tax policy on buildings insulation and energy savings could also be enforced, attributing bonuses to those saving energy. However, such regulations must be applied carefully to not deprive the owners of their rights by enforcing urban regulations and hence not to generate a sense of loss or alienation within the local population that will lead to conflict. A ‘custodian of the common good’ could regulate and implement the rules and coordinate all the stakeholders.

(SOLUTION 2.15) Restoration of the Port of Beirut

Beirut’s port activities should specialize in containerization on a medium scale and the transit procedure should be accelerated by reducing customs and creating free trade zones to increase its activity without expanding its area. A complete refurbishment without including these factors would be a waste of money as well as environmentally destructive. Nonetheless, its activity should be preserved as it generates employment and riches for the whole country. The reconstruction of the port and of its subsequent activities must also bear in mind the oncoming rise of the sea-level. A national port authority must be created to determine reconstruction and activity criteria and to negotiate with private partnerships that are bound to be attracted by this lucrative opportunity. The port of Beirut should shelter a place of memorial for the explosion, an imperative to help the process of healing from this trauma and to encourage reconciliation without forgetting. Overall, a wider reflection must be taken on the whole building, energy and mobility sectors. Rapid and far-reaching changes in the way we use buildings, design cities and mobility networks are required. However, to ensure the application of such changes a national agenda for climate change is necessary to implement it at all levels.

(SOLUTION 2.16) Spreading Importance of Cultural and Tangible Heritage in Rebuilding

Cultural heritage is a major component of quality of life and plays a vital role in the wellbeing of the society and communities. In its physical reality, cultural heritage fits within environmental recommendations with an

emphasis on the reuse of buildings, the conservation of already existing tangible elements, as well as on circular economy. Emphasis should be given to traditional knowledge and practices (including construction practices) that promote low carbon, place adapted, resource efficient strategies and values, and these should be incorporated into Build Back Better strategies and used to adapt to change climate conditions and reduce and avoid greenhouse gas emissions. The rebuilding of the tangible historical buildings of the city is a priority. This reconstruction process must start by the consolidation of the buildings and their protection from the weather while simultaneously planning smaller scale rehabilitation of small buildings, and houses and public spaces. The restoration must be done using local techniques, crafts and expertise. Such methods would have multiple benefits, including the involvement of the local population, the preservation of distinguished cultural identities, and climate efficient reconstruction reusing the old fabric and boosting a local circular economy.

(SOLUTION 2.17) Revitalization of the cultural life and of the creative industries

The revitalization of the cultural life and of the creative industry is also a major prerequisite for the physical and social reconstruction of the devastated city, for an estimated budget of 15 million USD. Indeed, culture is a vector of social cohesion and a tool for the promotion of tolerance that are essential to face future crisis. The cultural and creative industries must be protected and revitalized as both social and economic assets as they will lift the national and local economy and provide employments and maintain Beirut as a cultural and creative hub. Moreover, the creative industry fosters income generating activities in a variety of trades often involving remote areas, women, and young people. Temporary spaces could be made available for the exercise and display of creative activities. Such measures would respect the cultural significance of the local area and enhance its lively commercial and touristic activities.

(SOLUTION 2.18) People and Community Centered “Bottom-Up” Participatory Approaches

The preservation of cultural heritage is as central as providing shelter and first-aid to a people- centered and place-based approach, two elements crucial to implement a CURE framework. The involvement of local communities will not only enable social, physical and economic recovery, but

will also ensure sustainability and resilience. It is essential that the local communities can return to their own neighborhoods and, whenever possible, participate with their reconstruction, to foster ownership and inclusivity. Moreover, the reconstruction must fit the residents' priorities, needs and concerns. To deal with all these issues, the reconstruction will have to solicit the potential of each actor, and will require a coordinated response on the ground, while maintaining a holistic approach in partnership with all the involved entities. Hence, there is an absolute need to build back the bridges and the trust between communities and institutions. The role of local authorities should be reinforced, notably in terms of coordination between institutions. Moreover, the disparities between the different municipalities will hinder the decision-making process, as their general approval is necessary for any decision. To facilitate and accelerate the recovery process, small-scale initiatives with a bottom-up participatory approach should be prioritized over general urban reforms.

(SOLUTION 2.19) National and International Engagement in Recovery Process

This recovery process will require national and international support to compensate for the lack of internal government. The international community can tap into its technical expertise and logistical support. A joint initiative with the UNESCO and the World Bank on a CURE framework and Historic urban Landscape (HUL) focused on an integral urban regeneration could be applied to Beirut. Furthermore, Beirut should be used as a case-study to draw up guidelines for future critical situations and generate global debate. Moreover, the cooperation among institutions concerned with urban development should be strengthened in such a way to ensure sustainability. All these institutions should engage in conversation over new legislation regarding sustainability and the preservation of heritage for a customized and revised master plan.

Critical Urban Infrastructure: Identifying and Assessing Smart and Green Solutions for Efficient Disaster-Risk Resilience (UTC #4)

Lead Organizer: P4CA Planners for Climate Action

Co-lead Organizers: UN-HABITAT & IRPUD

Where: Global - Online

More INFO: <https://www.eventbrite.de/e/critical-urban-infrastructures-ci-registration-143093698103?utm-medium=discovery&utm-campaign=social&utm-content=attendeeshare&aff=escb&utm-source=cp&utm-term=listing>

DESCRIPTION:

(SOLUTION 2.20) Nature Based Solutions Focused on Water Resilience

Water is indispensable for earth resilience and sustainable development water regulate the earth climate support biomass production and supply water resources to human societies among all the systems most critically affected are the water systems these days drought and flood are the prominent problems which leave an impact on settlements villages towns cities urban lives. Everyone knows that flooding results not only into loss of millions of dollars, but it affects biodiversity it affects animals, wildlife and of course human lives too on the other hand what would you do if you ask for a glass of water and you don't get it water is vital for life and scarcity of water will lead to strife of course. Scarcity of water leads to war famine mass extinctions and devastating diseases. Water resilience may include ecological aspects of water quality or flood mitigation engineer infrastructure to ensure safe and reliable water supply and to equitable government governance of these systems along with other mitigation strategies which are commonly known. Nature-based solutions such as mangroves protecting shorelines from storms lake storing large water supplies and flood plains absorbing excess water runoff are a key part of flood mitigation strategies according to me these natural services perform an infrastructure like function working with this natural infrastructure can optimize the performance.

(SOLUTION 2.21) Engineered Infrastructure and Innovation to Address Water Management

Financial benefits of engineered infrastructure to address dot conditions it is essential to implement more holistic water management by incorporating water recycling storm water capture and reuse using multiple and diverse sources of water like surface water groundwater then recharging the water table reclaiming and recycling water for non-potable uses such as using rainwater for gardening then for toilet flushing which in turn requires new infrastructure and regulations to balance public health and other concerns as well. Employing water services treatment systems which automatically can decrease the load on water supply system is one more strategy which can effectively help the water resilience and the most important is transitioning dialogue into implementation. A more sustainable approach to combat episodes and drought is to increase soil water storage and the overall green water efficiency of agroforestry and cover crops which can improve water management related to animal crop systems such practices ensure living roots in agriculture systems throughout the year and offer an approach to agro ecosystem design that mimics ecological dynamics of native perennial vegetation.

(SOLUTION 2.22) Rejuvenating Sustainable and Traditional Water Resilient Practices

It is very important to make public aware about the sustainable water supply system. If those are present in their cities or in their regions and government should also take care of such systems. If we talk about the traditional and ancient resilience which could be adopted in today's context in many states and in many countries, there are ancient water systems which are still existing like aqueducts of Rome. In Iran 400 years old in our systems of orangutan city of Maharashtra and there are many more so it's very important to make public aware and build the capacity or through education of taking care of such system. In India there are traditional water systems which were highly sustainable and were evolved in response of eco geology and geography of the region in India the history of water systems and their management goes back a long way right from water being worshipped for being sacred to making use of water as a decorative element the history of India is laden with several examples of sophisticated water management systems that prove that ancient India had a profound understanding of hydrology and this understanding. This should be calculated into new generation as well there are various sustainable water harvesting systems like bamboo pines of eastern Himalaya's ghou of west Himalayas Jabo system

Shioji system of north and western USO all these systems are going along with the geography and geology of the particular region like in third dessert and in western India. We can see kung then Khadeens Nadees stiff wells which are very famous examples of rainwater harvesting so all the ancient water supply systems are highly sustainable as they improve the quality of human life in those days while living within the caring capacity of the ecosystem which is another important aspect and they evolved as a direct response to geological and geological conditions of regions. Many of them rely on only gravitational force instead of any mechanical force for carrying the water from source to destination such systems if rejuvenated or replicated could get other towns without involving any electricity or mechanical forces and they can save millions of dollars which are being spent on water system or in these days.

Female Approaches to Build Climate Resilience (UTC #7)

Lead Organizer: INTERNATIONAL UNION OF ARCHITECTS - UIA

Co-lead Organizers: HPF, ISOCARP, RTPI (GPN)

Where: Global - Online

More INFO: <https://www.uia-architectes.org/webApi/en/>

DESCRIPTION:

(SOLUTION 2.23) Networks of Women for Knowledge Exchange and Positive Climate Action

Women already contribute to put a hold on the climate crisis even though they are barely recognized for doing so even in crisis and situations of scarcity. Women lead and promote concrete action that improve life quality and protect the climate. Women in Brazil fight for rights they maintain traditional knowledge and many other roles they have in the community. Organizations of indigenous women kill Umbalas. There are women and traditional communities that have promoted advances in terms of democracy rights and public policies. Fisher women face the climate crisis through their network. They have created networks of fisher women to discuss and decide how to react to climate change. Though the work is still in its early stages, it has made the women of the region feel very empowered. It is an open collaboration and knowledge exchange between scientists and fisherwomen to find solutions and invite local managers to be involved to subsidize public policies as well.

Tackling a Double Threat: Children at the Front and Center of Urban Fragility/Climate Change (UTC #9)

Lead Organizer: [World International Vision](#)

Co-lead Organizers: [Plan International](#) & [UNICEF](#)

Where: Indonesia, Philippines, Bangladesh, Mongolia, Jordan

More INFO: <https://reliefweb.int/report/world/tackling-double-threat-children-front-and-centre-urban-fragility-and-climate-change>
<https://reliefweb.int/>



DESCRIPTION:

(SOLUTION 2.24) Increased Participation of Children in Climate Related Policies

Support increased focus on protecting children's specific rights and child and youth participation/voices in climate-related policy discussions, plans and forums: Include child rights and child voices in the country's revised Nationally Determined Contribution (NDC) and/or implementation plans, National Adaptation Plan (NAP), and long-term emissions development strategies, ensuring coherence with COVID-19 recovery plans and SDG 13 and SDG 11 implementation, and support increased participation of children and youth in discussions and decision-making processes at COP26. Support increased focus on children and participation of children especially those living in precarious urban settings like slums and informal settlements in local planning and monitoring.

(SOLUTION 2.25) Investment in SDG Focused Education for Children

Support child and youth awareness and action through climate change / environmental / SDGs-focused education for all children: Many children and youth are already speaking up and acting on the climate crisis. Collaboration can further strengthen the capacity of children and young people to understand climate and environmental issues and, in turn, take positive

action by establishing and investing in climate change and environmental education for all children. Increasing children's knowledge of these issues is also part of the continuum for enhancing their meaningful participation in climate change decision-making processes, including at COP26 and beyond. UNICEF-supported platforms like the World's Largest Lesson and this Toolkit for Young Climate Activists can assist in this process.

(SOLUTION 2.26) Accelerated Investment in Child and Youth Responsive Climate Measures

Scale-up and increase the calls for investment in the intersection of child rights, climate change and the environment, both in national budgets and through development assistance. A call for urgent scale up and accelerated investment in child and youth responsive climate measures, including progress to fulfil the global \$100 billion climate finance commitment, and increasing the proportion that flows to adaptation and resilience-building in key services like WASH, health and education, prioritizing interventions that reach children most at risk, including those in cities.

(SOLUTION 2.27) Warning System and Waste Bank Designed by Children and Youth in Indonesia

Children and youth designed and developed a community early warning system for floods in Jakarta. This prototype was supported by the Jakarta Agency for Assessment and Application of Technology, for further development and roll-out to additional informal settlements. Thirty children and youth also established a Waste Bank in a Jakarta settlement. The initiative was led and supported by the local government. 115 local government stakeholders were trained on child protection, gender equality, as well as in participatory and child-centered approaches to climate change and urban resilience planning.

(SOLUTION 2.28) Training Children and Youth in Urban Resilience Planning in the Philippines

In Manila, 120 children and youth were trained in disaster risk reduction, climate change adaptation and urban resilience planning. These young participants developed their own Family Preparedness Plans to ready their households for potential disasters. It also trained 40 children and youth as Youth Innovators in Manila. Together they design and prototype ideas for urban resilience and climate change adaptation in their own communities.

115 local government stakeholders were trained on child protection, gender equality, as well as in participatory and child-centered approaches to climate change and urban resilience planning.

(SOLUTION 2.29) Child Protection Measures in Disaster Risk Reduction Plans for Bangladesh

Over 92 urban communities have integrated child protection measures in their disaster risk reduction plans, where children participated in the planning process. Together they design and prototype ideas for urban resilience and climate change adaptation in their own communities. Through these interventions, urban residents, especially children, acquired knowledge on disaster risk reduction and climate change adaptation, changed their attitude and concentrated disaster preparedness initiatives by themselves.

(SOLUTION 2.30) Educating Children and Youth on the Importance of Digital Assets as a Tool for Advocacy in Mongolia

Adolescents from two districts in Ulaanbaatar were actively involved in addressing air pollution through data collection that documented the adverse effects of air pollution levels in the city. More than 1,000 adolescents learned about air pollution at the Mongolian National Scouts Jamboree in mid-2019. Attendees learned digital mapping; photography and blogging to better communicate for greater awareness-raising and advocacy; how to protect themselves, their peers, and families from adverse effects of air pollution; and how to measure air pollution levels in their communities. They were provided with simple air quality monitors by UNICEF Mongolia to note pollution indexes and log results inside and outside of school.

(SOLUTION 2.31) Construction and Running of Green Centre in Jordan

Construction and running of a Green Centre for sorting and processing waste, powered in part by solar energy. Provision of two types of bins for recyclable and non-recyclable waste for every eight households. Daily collection of 21 tonnes of solid waste from households and community centres. Behavior change campaign targeting community meetings, households, schools and children's centres to encourage sorting and recycling at the source. Community mobilisers organized child-focused awareness-raising on waste separation. Cash for work opportunities for Syrian refugees through the hiring of 40 Incentive-Based Volunteers (IBVs) for daily collection and sorting and 150 IBVs on a monthly rotation for behavior-change activities.

Legislación Urbana: Herramienta de Acción Climática (UTC #11)

Lead Organizer: [Colegio de Jurisprudencia Urbanística](#)

Co-lead Organizers: [Tradicional Ip Man Wing Chun International Association](#)
& [Fundación CIUDADES 2030, Ciudades en Movimiento](#)

Where: Global – Online

More INFO: www.cjur.org



DESCRIPTION:

(SOLUTION 2.32) Free Legal Assistance from Public Defenders

Neighborhood organization with the support from NGOs and experts to reverse the situation of extreme social, economic, cultural and environmental vulnerability that can be seen in the neighborhoods. The aim is to promote before the courts the adoption of dynamic mechanisms to execute collective sentences. Management of urban legal science in land use planning. There is currently a proposal for the construction of a new legal paradigm from the facts and the law.

(SOLUTION 2.33) Using Sports to Promote Public Spaces

The main objective is the social transformation for a dignified life and happiness, through urban law, legislation, as well as, through the recognition, guarantee, defense and promotion of Human Rights; in a peaceful and innovative way, applying an integral approach, centered on the human person. One example in this case is promoting the use of public spaces through sport.

(SOLUTION 2.34) Promote Training Based on Urban Development, Human Rights and Climate Change

Develop more training for civil servants, members of public and private organizations, and the public. Actions include the promotion of comprehensive urban legislation and climate change, promoting the adaptation of urban development programmes with a climate focus and training events on urban climate change legislation, activities with NGOs to promote public space and climate change.

(SOLUTION 2.35) Points of Action for Urban Legislation in Latin America

In Latin America there is a strong system of international agreements related to climate change to support urban legislation regulation. As a result of this UTC, five points of creation or action in urban legislation and climate change points have been proposed. The first one is to legally regulate the preparation of urban development plans and urban design that consider the effects of climate change and disaster prevention. The second one is to incorporate in the urban impacted studies and in the procedures for the issuance of urbanization or construction permits analysis of prevention mitigation and adaptation of climatic impacts. The third one is widely developed specific regulations on prevention and adaptation to climate change in national organization. Legally regulate the preparation of urban development plans on urban design that consider the effects of climate change and disaster prevention. Finally develop and specify in urban legislation and regulations the human rights associates with climate change the protection of life the environment health water housing and the right to see. There is a strong focus on widely developing specific regulations on prevention mitigation and adaptation to climate change in national and national urban legislation. It's the connection between urban legislation with the contents of climate change and prevention of risks and in the second area most important is to prepare construction and land use regulation with architectural design elements for climate change.

Climate Action for Resilient Communities by, and for, Women (UTC #12)

Lead Organizer: Red Dot Foundation

Co-lead Organizers: [National Institute of Urban Affairs](#) (NIUA), [The Urban Vision](#), [Project Mumbai](#)

Where: Global – Online

More INFO: www.safecity.in

<https://us02web.zoom.us/join/9tZdU6RqTkpH9TmWCNHIhePqqQYZ3bFZKD9>



DESCRIPTION:

(SOLUTION 2.36) Intersectional Gender Lens integrated into Urban Planning

Universal and contextual gender- sensitive standards to be designed by central and state governments respectively. Gender Responsive Budgeting, adopted as a technical process for designing the estimated revenue and expenditure, thereby ensuring gender-equitable distribution of resources. This approach should be integrated into government, private body and civil society's budget designing.

(SOLUTION 2.37) Diverse Gender Representation from Different Socio-Economic Backgrounds in Decision-Making

Build standards or fix a quota for diverse gender representation from different socio-economic backgrounds in decision-making boards across government, private and civil society institutions. Co- Create Gender and Climate Justice Action plans, representative of multiple realities, and make it mandatory to be abided by all the bodies.

(SOLUTION 2.38) Gender Segregated Transport and Gender-Sensitive Infrastructure

Gender Segregated Transport to increase participation of women in public spaces in the short run. While private transport can lend a sense of safety, it is not environmentally friendly. However, the long-term goal of an equitable and inclusive society can be achieved through sustained systemic changes of making mass transportation safe and accessible to all. This will also align well with the larger goal of cutting down on private transport. The transport infrastructure needs gender-sensitive redesigning to make it easier and more accessible to women. For instance, distress call buttons should be readily available in all transports. Moreover, police teams must go through mandatory gender sensitization training to sensitively address any case. Leveraging Existing Policies: An increase in asset ownership in lower-income women can be achieved by leveraging the Electric Vehicle Policy. For instance, Self Employed Women Association (SEWA), New Delhi is actively working with their members to adopt and operate electric rickshaws.

(SOLUTION 2.39) Decentralized and Diverse Representation in Decision Making

Inclusive and equitable society based on empathy, which does not discriminate based on an individual's gender, color, caste, race, language, disability, age or generation. Decentralized and diverse representation in decision making to ensure that every opinion, voice and experience is brought to that table. This evidence-based policymaking will lead to more people-centered policies in action.

(SOLUTION 2.40) Reclaiming Public Space Through Impromptu Gatherings

By spending more time in public spaces through impromptu gatherings, a sense of belonging is created with the city. Such 'Safety Walks' should be regularly organized during day and night hours to reclaim spaces.

(SOLUTION 2.41) Reducing Consumption and Waste Through Environmentally Conscious Alternatives

Edible Cutlery: Usage of edible cutlery can be promoted and incentivized. It is an environment- conscious alternative to plastic cutlery and if not used it can easily decompose.

Zero Waste Living: A lifestyle that promotes reducing consumption, waste generation and thereby adopting a sustainable way of living. For instance,

sending plastic waste for recycling, preparing compost from kitchen waste at home and donating compost.

Constructing Ecosan Toilets: Such toilets do not require water and hence are a good alternative in water- scarce areas. When the pit fills up, it is closed and sealed. It recycles the nutrients from human excreta to create valuable organic manure that can be used in farms.

(SOLUTION 2.42) Maintenance of Kochi Metro Railway Stations by Women

Women partnered up with a local organization called Kadamba Sri and recruited over 600 women and 12 transgender people in the maintenance of the metro railway stations. It also provides employment as stations are being managed by teams of all-women. Goals include and involve the needs and ideas of women and girls who comprise of 50% of the population to build resilience in the city. Restricted mobility of women leads to forgoing work opportunities, and this is primarily due to the lack of a safe and efficient public transport system of safe public spaces and these further impacts women's education livelihood opportunities. It is very important to ensure women's voices experiences and opinions are well represented across the decision-making levels and evidence-based data must be incorporated.

(SOLUTION 2.43) Gender Lens for Inclusive Participation

In Pani Haq Samiti and Coro, solutions for climate resilience included bringing in local women to advocate for their communities and highlight problems using social media. One recommendation is to actively engage with gender disaggregated data in assessing the nature of the problem and designing creative solutions to it and going beyond the gender and the binary to integrate into sectionality, whether it's age ability disability caste religion. There is evidence that is useful for policy makers to act upon and build capacities of individuals and give them a voice. Every action plan should be beneficially centered with a gender lens so that you can have active participation and involvement in the process from the very beginning.

Countless Futures: People Will Live Here (UTC #13)

Lead Organizer: PUSH

Co-lead Organizers: FARM

Where: Favara - Sicily, Italy

More INFO: <https://www.ilfattoniseno.it/tag/human-forest/>,
<https://www.ibs.it/palermo-biografia-progettuale-di-citta-libro-vari/e/9788862425216>, <https://www.lanificioleo.it/>

DESCRIPTION:

(SOLUTION 2.44) Parkyfyng the Future

The fight against Climate Change passes through our cities and better use of the underdeveloped and abandoned spaces. The practice of removing unused paved areas and planting wild trees, flowers, and herbs helps reduce the heat-island effect and re-build the relationship between humans and nature. Parkyfyng plays with the concept of transforming in parks unexpected areas of the city: abandoned buildings, railway tracks, residual spaces, etc. By removing unused pavement from specific areas, nature will reclaim those spaces and create green areas and parks in the city. This idea has been represented by the project Human Forest realized in Favara by FARM.

(SOLUTION 2.45) Housing Diversity

The pandemic shed new light on the new roles of our housing spaces and the activities that are performed in them: work, study, exercise, and rest. Our cities need to better respond to these challenges through the development of a shared vision for the future that can guide the planning process and therefore influence the construction sector. The book “Palermo - Biografia Progettuale di Una Città Aumentata” presents an atlas of case studies and good practices applied at the city of Palermo, that can be replicated in other contexts.

(SOLUTION 2.46) Good Business for a Sustainable Growth

Through business, we can support sustainable processes that rediscover long-lost traditions in manufacturers that are supporting the balance between respect for our environment and profit. The experience presented by Lanificio Leo in collaboration with Morgana Orsetta Ghini, offers a new perspective on sustainable slow-fashion and craftsmanship. Since the

pandemic has started, the housing space has been contaminated with business practices and the lines between the two became blurred. In Italy, people started questioning their current lifestyle and the long-term vision offered by their careers. This created two movements: South Working, the idea that you can live in other cities or regions (predominantly in the South of Italy) while working for a business located elsewhere, and a new approach to the idea of business: Good Business. With "Good Business" we intend all the practices oriented to generate profit through sustainable and slow practices, as well as an idea of profit that will be directly redistributed in actions that sustain local communities, the environment, and the planet at large.

Planning the African Metropolis for Climate Resilience (UTC #14)

Lead Organizer: FNAU

Co-lead Organizers: Institut Paris Region, Climate Chance

<https://www.climate-chance.org/>, Metropolis <https://www.metropolis.org/>

Where: Global – Online

More INFO: www.fnau.org

<https://www.euromediterranee.fr/>

<https://www.celluleinfra.org/>

<https://www.afd.fr/fr/ciclia-cities-and-climate-sub-saharan-africa>

<https://villededakar.sn/tag/pcet/>

<https://www.climate-chance.org/bonne-pratique/mwayei-o-afrika/>



DESCRIPTION:

(SOLUTION 2.47) Initiative African Sustainable Cities – EPA

Euromediterranée

This initiative carried by the French community of urban planners, focus on making emerged resilient, sustainable and inclusive urban planning strategies for Mediterranean and African cities. It aims to create a network among urban planners to foster the capacitation between Mediterranean cities which are facing common stakes, in particular about climate resilience, the implementation of partnerships and cooperation projects and to structure a Mediterranean urban planning sector and ecosystem.

(SOLUTION 2.48) Creation of a Department to Implement Two Projects related to climate change - City of Kinshasa, Republican Democratic of Congo

The metropolis of Kinshasa created a city department (CDUK Department of Urban Development of Kinshasa) dedicated to the coordination and implementation of two projects: PILAP financed by the French Development Agency, and Kin Elanda, financed by the World Bank. Those projects aim to address climate change challenges through planning tools for adaptation and resilience.

(SOLUTION 2.49) The French status of “Société à Mission” - Réalités HUB5 and Realité Africa

Since 2019, French companies are able to get the status of “société à mission” which helps them to define their strategy of development according to social and environmental objectives. This status impacts the participation of the private sector to the collective good, to commit themselves to support and act on facing climate change for territorial development.

(SOLUTION 2.50) Ciclia: Cities and Climate in Sub-Saharan Africa – French Development Agency

This initiative is a facility that aims to bring a financial support to around 25 Sub-Saharan African cities. This initiative supports different phases of the local projects from feasibility studies, technical assistance and expertise, projects and strategies, to address climate change challenges.

(SOLUTION 2.51) PCET (Territorial Climate and Energy Plan) of Dakar – City of Dakar, Senegal

The PCET, of the metropolis of Dakar is an ambitious plan to improve urban governance toward ecological and climate transition and urban planning, aligned with national objectives. This plan aims to create an integrated governance structured around the ecosystem of stakeholders.

(SOLUTION 2.52) Mwayei Ô Afrika

This initiative has been implemented in Cameroon to achieve energy transition for cities. It is based on the production and supply of hydraulic electricity. This system will be linked to electric meters and paid by mobile money.

(SOLUTION 2.53) New Systemic Framework for Planning Metro Policies

Because the population growth is rapid in African metropolises, it is coupled with urban sprawl which often is settled in vulnerable. All areas in the cities and population are settled in procures precarious settlements that are more vulnerable to climate change and climate events. Urban sprawl systematically is compounding is a compounding factor of climate risks We noticed a lack of structure and governance for implementing policies that could allow action on the ground. It is a social and urban challenge at the forefront, and we can use this transition as an opportunity and to be a model in creating and implementing resilient metro policies. It was first necessary to draw an operational and systemic framework that is adapted to the context considering social and economic matters for planning territorial resilience and implementing climate transition of metro policies. It's necessary to emerge leadership embodied by public and local actors and it implies financial capacity building through the organization and the structuration of a governance and public services on resilience. This leadership is essential to identify and gather an environment that enables a dialogue for all to share ecosystemic responses to an ecosystemic challenge and risk. It's key to make all the stakeholders commit to planning resilience and to address climate change impacts from metropolis from national scale to individual scale. It's essential also to involve citizens and for local authorities and national authorities to support experimentation in for projects addressing climate change and from that we also put out some tools that need to be powered to couple urban planning and design planning which is necessary to couple together to for resilience before activating financial levels.

(SOLUTION 2.54) King Elanda Project

One project implemented by Kinshasa in Democratic Republic of Congo. One of the most populated and biggest metropolises in the continent with 15 million inhabitants in 2020 so this area is facing this challenge. Growing population which is mainly settled in informal housing vulnerabilities to climate change events like flooding and roads and so on and thanks to a strong political awareness and ambition for making the megapolis resilience to climate change events. They implemented a project which is called the King Elanda supported by the world bank and this project is focusing on planning resilience and on and they focus also on procure settlements through resilience in France infrastructures. The launching and implementation of this project helps putting at the center of the mega

strategy development climate resilience and thanks to that they managed to create opportunities financial opportunities to straighten their services and their infrastructure so it's like a virtuous cycle that is created. Kinshasa opened the municipal section dedicated to the implementation of this project creating an environment for dialogue for gathering different actors that are stakeholders that are implicated in in the climate change planning. This is the voluntarist approach helped to build a strong vision for the development of the metropolis which acknowledged the need to address these challenges for resilient cities.

(SOLUTION 2.55) Launching “Habitat professional Forum HPF Covid -19 RoadMap” document publication (UTC #20)

Lead Organizer: HPF Habitat professional Forum

Co-Organizers: UIA, ISOCARP, GPN, EAROPH, CAP, CSU, IFLA, ICOMOS, CNJUR

Where: Global – Online

More INFO: <https://www.villes-developpement.org/hpf-roadmap-for-recovery-from-the-covid-pandemic-and-climate-changes/>



DESCRIPTION:

Since the common enemy is a virus that is also a growing surge of misinformation, there is an urgent need to promote facts and science as well as hope and solidarity over despair and division. Today's threats must be addressed through multilateral cooperation. The launching of the HPF COVID-19 ROAD MAP to all the professionals globally will inform them with the final experiences, theories and knowledge in all their specializations towards the new normal facing our lives in these times to promote and inspire acts of Solidarity and humanity around the world. The objective from this publication is that Habitat Professionals Forum (HPF) stands for advocacy and knowledge exchange, raising awareness, solidarity and support among professionals in this difficult time and it is deeply concerned by the growing impacts and unintended social and economic consequences of COVID-19 pandemic crisis, which has revealed the fragility of urban and territorial systems.

University and City for Climate Action (UTC #15)

Lead Organizer: Smartly, Social Entrepreneurship on the SDGs

Co-lead Organizers: Universidad Técnica Particular de Loja, Ecuador; Unesco Chairs (UTPL)

Where: Global - Online

More INFO: www.insmartly.com,

<https://reinventingourtown.wixsite.com/website/quienes-somos>,

https://twitter.com/R_O_T_project

https://www.instagram.com/reinventingourtown_/

<https://www.bhybrid.com/es/>, https://twitter.com/BHybrid_es

https://www.instagram.com/bhybrid_es/

<https://islaurbana.org>, <https://twitter.com/IslaUrbana>

https://www.instagram.com/isla_urbana/

<https://www.bivica.org>

<https://lojaverdeysostenible.com>

DESCRIPTION:

(SOLUTION 2.56) Legislation and Academia for Inclusive Urban Planning in La Plata

A query is a huge scar in a city that separates and divides the community. Neighborhoods have taken the responsibility to re-adapt this urban planning by working together with local authorities, the municipality and urban planning experts. Schools in La Plata (Argentina) also organized spaces making it more sustainable and safer for the communities. Female students shared their ideas and proposals and they were very empowered in terms of how to connect to their own community. With the youth playing an active role in tackling climate change in their own communities through the public spaces/query's, it gives them a sense of hope and opens possibilities to engage with authorities and stakeholders. Another example of this friendly legislation regarding sustainable tourism is with the municipality of Marte Plata where locals worked with their parliamentarians incorporating the SDGs in the legislation for economic reactivation. New UTCs are being developed to highlight the important role of legislation and local parliamentarians. Working with the legislative level and academia to connect both spheres in trying to solve these urgent actions of mitigating and adapting to climate change. One

of the main goals is to connect those who are fighting for the same causes but not collaborating and working together to boost their actions.

(SOLUTION 2.57) Reinventing our Town Project - Crisol High-School

A group of female students of Crisol High school (15 years old) are working on a project to improve La Cantera's space (an urban quarry) from the City of La Plata (Argentina). The objective of this project is to reconvert this space into an urban area that meets the needs of the citizens as well as it has an environmental and sustainable commitment. They want to design an educational area for the town and create a public space using renewable energy in a solar bank, bike rack, water generator and recyclable containers for a sustainable environment.

(SOLUTION 2.58) Smart Digitization of Public Citizen Services

Case of success: Municipality of Renca, Chile - BHybrid (Spain)

In the city of Renca (Chile) BHybrid works with different public and private organizations to digitize its services and help its citizens in digital skills. During confinement for the COVID-19 pandemic, the city needed to give access and manage the payment of vehicle circulation permits, digitize processes, and optimize resources. For this reason, digital cards were created as vehicle traffic permits and allowed to create accessible content from different platforms. These digital cards help municipalities and any organization to be more environmentally responsible and sustainable.

(SOLUTION 2.59) Rain Schools - Isla Urbana

Six out of ten schools in Mexico lack access to clean water. Founded in 2018, Rain Schools is an integral program developed to supply public schools with high quality and abundant water provision by implementing rainwater harvesting systems. In addition to installing the systems, the program implements educational and participatory workshops with teachers, students and parents. These workshops educate and empower the school population to become responsible for maintaining the system and spreading knowledge of a positive water culture, both at school and at home. With a rainwater harvesting system, a school can capture between 500,000 liters (132,000 gallons) and 1 million liters (264,000 gallons) per year of rainwater, which can cover a school's needs for 6 to 9 months per year.

(SOLUTION 2.60) Urban Laboratory of Loja

The Urban Laboratory of Loja (Ecuador) is characterized by working on territorialization and the improvement of neighborhoods and public spaces through planning tools with a climate change approach and local green infrastructure policy. With a multi-stakeholder approach, the Urban Laboratory of Loja collects solutions to urban problems and generates national and inter-city contributions. The Urban Green System is a proposal for urban planning and spatial planning, where resources such as water, green areas, parks, as well as conservation and productive areas are considered as important spaces in the lives of citizens that deserve to be protected.

Mass Housing and Climate Change: Challenges and Solutions (UTC #19)

Lead Organizer: STRELKA KB

Co-lead Organizers: ISOCARP Institute

Where: Global - Online

More INFO: <http://masshousing-lab.strelka-kb.com/>

DESCRIPTION:

(SOLUTION 2.61) Regeneration and Good Planning of Mass Housing

We understand housing as all units of housing which are a high rise and in which approximately 500 people live and so it's usually blocks or towers and we see them in many cities in the world. The focus was on this specific type of housing as there should be specific policies for mass housing that are different from other types of housing. For example, suburban sprawl which should have its specific policies and so in itself mass housing cannot contribute to resilience. The regeneration of mass housing or the good planning of future mass housing could contribute to overall resilience. The housing stock that was built in mostly in the second half of this the 20th century is not resilient. In Russia only, it is estimated that 70% of the urban population lives in mass housing units (70 million people living in mass housing units). Majority of those housing units were built in the soviet times using industrial means of construction and they had a good philosophy the idea was to bring modern modernity to people to provide them with space with light with a private space because they used to live in barracks sometimes and in shared apartments and so it was it was a sign of progress. Through four case studies in Brazil, Uzbekistan, Russia and Germany, 40 people tried to come up with architectural and urban planning solutions to adapt the existing stock to a changing climate. In the average zone like Samarkand where the climate is already arid it's going to become even hotter. One of the solutions is drawing on middle east vernacular architecture that existed in Qatar like windmills that help to ventilate the apartments and to make them cooler. Mass housing units are all the same despite very different climates and the idea is to draw on traditional historic techniques to face and to adapt to harsh climates and to turn those existing housing units into something more resilient.

(SOLUTION 2.62) Renovation of Grand Park in Bordeaux

A famous French architect Christopher Ryton worked together with two architects that won the Pritzker Prize for architecture this year on the renovation of grand park in Bordeaux which is a mass housing unit. It's a very bland several blocks and they proposed not to tear down the block as it's usually done when people as well when governments don't know what to do with mass housing. To add a layer, the idea was to create to give more space to people so that they would have more flexibility and space for themselves and create an extended space which was a winter garden making the overall apartment more climate efficient. It needs less energy because it's a buffer zone and it also gives more light and this is a project that has existed for the past few years.

(SOLUTION 2.63) Adaptation of Existing Mass Housing in Rio de Janeiro

Rooftop - protection from sun and rain. Variable roof configuration will provide public green space, protection from excessive rainwater and overheating.

Facade - passive cooling. 30% recommended Window to Wall Ratio (WWR) to reach optimal thermal and daylight comfort. +1,3% increase on cooling system load by every 10% increase in WWR.

Balcony - flexible shading systems. A set of operable shades and air supply grills will improve the standard of living in a singular apartment.

Entry - adapted for emergencies. Complete redesign of first floors with pillared free space, see-through entrances with public spaces adapted to floods.

Public space - connection with green zones. Green public areas, utilized consciously to prevent rainwater runoff and create "urban sponges" to save the city from floods.

Neighborhood scale - sharing resources. Implementation of a set of measures at the neighborhood level for a group of blocks using natural and manmade environments.

The proposed solutions cover various aspects of human life in mass housing and bring various benefits to different groups of stakeholders.

Implementation of Urban Climate Change Action Plan in Kuala Lumpur (UTC Phase 7.0)

Lead Organizer: Studieninstitut Rhein-Neckar

Co-lead Organizers: Resilient Urban Planning and Development (RUPD) & ISOCARP Institute

Where: Global - Online

More INFO: <https://www.studieninstitut-rhein-neckar.de/index.html>,

DESCRIPTION:

(SOLUTION 2.64) Inclusive Climate Action Plans in Kuala Lumpur for Transformative Actions

Kuala Lumpur city hall is required by law to prepare tree plans that will guide policy and control development for Kuala Lumpur which are the structural plan 2014 the local plan 2040 and the strategic plan 2021 to 2031. The local development committed in those documents to capture and integrate the strategic and special related issues for climate action the city along with supporting policies that will ensure that Malay that Malaysia or Kuala Lumpur's long-term development is a plan to prevent rather than exacerbate climate change. To accelerate action Kuala Lumpur city hall has recently developed the Kuala Lumpur climate action plan 2050 to guide the actions required by the council and its stakeholders to achieve the objective of the Paris agreement. This climate action plan will integrate existing plans in previews and current documents including the identification of climate actions contained within these documents for short term as well as long-term transformative actions. This integrated average aims to ensure that climate-related goals and targets set but by the city are at the heart of the city's strategic planning framework and can achieve both carbon neutrality and climate resilience in the medium term by 2030 and long term by 2050. Malaysia or Kuala Lumpur already trying to somehow develop this climate action plan in an inclusive manner so basically by incorporating inclusivity in climate action planning we can reflect the voices of voices of all the people and throughout the kl climate action planning process there has been an emphasize and prioritizing and designing climate actions with inclusivity in mind.

(SOLUTION 2.65) City Work Tool to Bring Stakeholders Together

The first UTC organized in 2019 tried to bring different stakeholders on the table and use a tool developed by GIZ called the City Work Tool to see what exactly their main challenge is as a community. This time around the goal is to also bring the local community on at the table for their inputs to map the main challenges and prioritize what actions must be taken to implement and tackle these challenges on the ground.

Climate Adaptation, Heritage, and Public Space: An Exploration of New Urbanities for a Resilient Future (UTC TBC)

Lead Organizer: University of 17 Agustus 1945 Surabaya, Indonesia (Architecture Department)

Co-lead Organizers: Queensland University of Technology (School of Architecture and Built Environment)

Where: Global - Online

More INFO: <https://untag-sby.ac.id/>

DESCRIPTION:

(SOLUTION 2.66) Climate Heritage Network

The climate heritage network was implemented three years ago within the umbrella of e-commerce international council of monument and site. With support of 11000 heritage experts worldwide in 132 countries to support the UNESCO underwater related sites. The climate heritage network is an initiative with about more than 200 institutional partners and to tackle the question of climate and heritage. There is a book to identify all the links for cultural and natural heritage with climate change entitled “the future of our past” published on the UNESCO site and the e-commerce site. Currently there are recommendation policy papers and guidelines being prepared on the linkages between climate and heritage. An international survey has been conducted to have a look at how the planning system that exists takes into consideration heritage. It's a challenge because heritage has a very specific place in planning for identity and culture. One solution produced was that eastern architecture is fundamentally well adapted to very high-level temperature in Central Asia so it's much better and efficient than concrete.

(SOLUTION 2.67) Biodiversity Through Nature Based Solutions

Working for biodiversity in public spaces and buildings through nature-based solutions. The main goal is to connect and to put more nature in the city. It is less interesting for landscape architects and for companies to produce something which is less expensive, but NBS are three four times less expensive and much more productive for cities. There are huge production documentation examples everywhere in Paris, London and a lot of cities

around the world. In France, municipality is supported with territorial engineering to help them not to design the project but to help them to orient the project in a good direction and to hire the consultancy to design something which is related to nature-based solution. Good solutions are not so expensive they are less expensive.

#NATURE4CITIES SOLUTIONS

Nature itself can provide many answers in tackling the impacts of climate change, especially in rapidly growing urban areas. Learning from natural systems and processes can guide urban policies and help cities and local communities become more resilient and stable. Nature-based solutions can drastically change urban landscapes and provide diverse benefits both for city governments and for residents. They are multi-functional, cost-effective and provide a wide range of benefits, from improving public health to reducing energy costs and pollution to regenerating urban spaces. By accelerating the implementation of these nature solutions, decision-makers can help cities adapt to effects of climate change. The cases below highlight the need to abandon outdated approaches based on a worldview that are unable to deal with living and evolving systems, and shift to an alternative interpretation of sustainability and urban environments to enable the co-evolution of human and natural systems based on an ecological worldview.

The City We Need thrives on nature and culture. It recognizes the capacities and limitations of the natural systems which support it, values biodiversity and ecosystem services for the roles they play in urban health, environmental protection, aesthetics and livability. It incorporates cultural heritage, indigenous and traditional practices and techniques, as well as community-based solutions, in climate change mitigation and adaptation planning and strategies.

The City We Need has new pathways of sustainable living, valuing preservation and resource optimization. It harnesses effective solutions to ensure that resource extractions are minimized and resources fully reutilized, by improving waste management, generating clean and resource-efficient energy, decarbonizing the electric grid and enabling next-generation mobility. The city we need recognizes traditional mechanisms, enables knowledge and technology transfer, encourages innovations in addressing climate change.

(SOLUTION 3.1) Chengdu Park City Indicator System

Where: Chengdu, Sichuan Province, China

Organization: UN-Habitat

Intergovernmental Organization (UN)

More INFO: <https://unhabitat.org/un-habitat-helps-chengdu-scoop-top-urban-planning-prize>

Video: https://www.youtube.com/watch?v=dsFD76Ji3pk&ab_channel=WorldAssociationoftheMajorMetropolises



DESCRIPTION:

Creating Chengdu as a Park City involved a new city strategy, linking environmental dimensions with culture, services to citizens and economic growth. With a plan that runs into the middle of this century, Chengdu's strategy is to create a more sustainable urban environment with an improved quality of life, resulting from protected biodiversity and heritage, reduced energy consumption and carbon footprint, and enhanced services for the city's 16.5 million inhabitants. UN-Habitat's initial contribution to the project involved researching park cities around the world to analyze parallel experiences and producing a collection of international best practice. A 'Park City Indicator System' was then developed by UN-Habitat. Chengdu has created a Park City Demonstration Area in Tianfu New Area to challenge traditional urban development and present a new paradigm of creating cities within parks. A collection of biking and walking trails are developed that will eventually connect hundreds of parks across the metropolitan area. Eventually, it will form the world's largest green path network at 17,000 kilometers long.

(SOLUTION 3.2) Donghu Greenway

Where: Wuhan, China

Organization: UN-Habitat

Intergovernmental Organization (UN)

More INFO: <https://unhabitat.org/pilot-project-launched-for-improved-urban-public-spaces-in-china>



DESCRIPTION:

Before the construction of the Donghu Greenway, residents did not benefit from this ecological resource: the area was not easily accessible to the public and the scenic areas within the site were not well connected. The aim was to provide citizens with more access, improved, ecological and inclusive public leisure space and improve the living standard of residents of the Greenway. Donghu Greenway was the first project under the UN-Habitat demonstration project for China's urban public space improvement in collaboration with Wuhan Land Use and Spatial Planning Research Centre (WLSP). After its implementation, the number of visitors increased from 94,000 tourists in 2015 to more than 10 million in just two years leading to job creation and local economic development of the area. The greenway was open to all for free and led to many events and recreational activities being organized. The roads were given back to pedestrians, which increased the number of cyclists and promoted walking.

(SOLUTION 3.3) EcoZones: Catalyzing Transformations from the Neighborhood Scale

Organization: Wuppertal Institute for Climate, Environment, Energy Research Institutions

Where: Santa Tereza neighborhood (Belo Horizonte/Brazil)

San Enrique de Velasco and Ñaquito neighborhoods (Quito/Ecuador)

More INFO: <https://www.facebook.com/EcozonasUIO/>

<https://youtu.be/it6lwDceUXQ>

<https://wupperinst.org/>



DESCRIPTION:

EcoZones are a practical concept to implement integrated low-cost and low-carbon solutions to urban climate and sustainability challenges based on community needs and holistic-systemic urban planning for green recovery and climate change mitigation at the neighborhood level. The Wuppertal Institute, together with UN-Habitat and partners, use participatory methodologies and offer a scale for experimentation to increase the understanding of and support for linkages between sustainable and resilient urban mobility, public spaces, nature-based solutions and waste management in local development. This project is set in two pilot cities: Belo Horizonte, Brazil, and Quito, Ecuador. The EcoZone approach seeks to empower citizens to have an impact in local their community, raise awareness around and increase the collective knowledge of sustainable urban development and its socioenvironmental impacts.

(SOLUTION 3.4) Knowledge Sharing Platform of Nature-Based Solutions (NBS)

Organization: Urbanalytica

Civil Society Organization / Non-Governmental Organizations

Where: San José, Costa Rica & Milan, Italy.

More INFO: <https://urbanalytica.org/>



DESCRIPTION:

Nature-based solutions (NBS) have proven to be powerful tools for addressing climate change effects in an urbanized area while fostering low-impact and low-cost recovery in the light of the current planetary crisis. However, there is a challenge how to develop feasible and replicable strategies in regions in the global south, such as Latin American where there is a lack of data, resources, and technological tools. The proposed platform aims to provide expertise sharing between two contexts that are experiencing strong urban transformations: Costa Rica, a worldwide referent on Sustainable Development in the process of bringing this know-how into its urbanized areas; and Milan, transitioning into a smart sustainable city within the European recovery and innovation framework. The platform would facilitate a bi-directional knowledge transfer, to develop replicable and scalable NBS strategies. For this, current partnerships are developed with local organizations, public institutions and the Academia.

Public Spaces as Anchors of Social Resilience and Climate Action: The Role of Participation (UTC #1)

Lead Organizer: [Norwegian University of Science and Technology \(NTNU\)](https://www.ntnu.edu/studies/msa1)

Co-lead Organizers:

[UN-Habitat, Global Program Space Programme](#)

[The Centre on African Public Spaces, City of Johannesburg](#)

[The School of Planning and Architecture in New Delhi](#)

Where: Global – Online

More INFO: <https://www.ntnu.edu/studies/msa1>



DESCRIPTION:

(SOLUTION 3.5) The Siyakhana Food Garden in Bez Valley Park

The Siyakhana food garden in Bez valley park, Johannesburg Inner-city, is a part of a public space where people can plant and buy organic greens. It is also a platform for research and training. Collaborating with Universities, Corporates, academics and volunteers.

(SOLUTION 3.6) The Picasso Food Forest in Italy

The Picasso Food Forest in Italy, where the neighborhood took over management of an unused space in the city without support from the municipality.

(SOLUTION 3.7) Support for Informal Settlements in High-Risk Areas

A city-wide scale example was given to show how informal settlements in most high-risk areas such as Independencia, have been given support from the municipality in Lima, Peru. They have planted trees on the slopes above the informal buildings to prevent landslides.

(SOLUTION 3.8) Tree and Shade Plans & Policies

The example of Phoenix, Arizona, USA was given to show how a tree and shade plan, a policy driven by a combination of actions voted on by the community and with shared responsibility of implementation between both community and municipality, has provided both social and environmental benefits.

(SOLUTION 3.9) Wastewater Collection to Create Green Belt

In Ouarzazarte, Morocco, an effort was made to collect wastewater to create a green belt around the city.

(SOLUTION 3.10) The City-Wide Public Space Assessment Tool

The City-Wide Public Space Assessment (a tool used to measure distribution, quantity, quality and accessibility of public spaces across a whole city)

(SOLUTION 3.11) Using Minecraft in Implementing the Block-by-Block methodology

The Block-by-Block methodology (a participatory process that uses the game Minecraft to co-design public spaces)

(SOLUTION 3.12) Public Spaces for Improved Air Quality and Carbon Sequestration

Public Spaces [in Windhoek, Dar es Salaam] are very important for shade, particularly in drier areas as well as improving air quality and carbon sequestration.

(SOLUTION 3.13) Public Spaces for Building Resilience

Public spaces in Kathmandu as vital components of identity, community infrastructure and post-disaster (earthquake) resilience

(SOLUTION 3.14) Three Lined Streets as Models for Promoting Accessibility

Three lined streets in the historic centre of Dire Dawa (Ethiopia) as models for providing climate comfort in public spaces and promoting accessibility

(SOLUTION 3.15) Allotment Gardens for Traditional Urban Agriculture

Allotment gardens as traditional examples of urban agriculture.

(SOLUTION 3.16) Green and Blue Spaces on City-Wide and Regional Scale

The pertinence of the approach of planning networks of public and of green and blue spaces on a city wide and regional scale.

(SOLUTION 3.17) Convertible Spaces for Flooding Retention

Convertible public spaces along rivers that can become flooding retention areas such as an open Amphitheatre in Copenhagen.

(SOLUTION 3.18) Informal Economies for Post Disaster Relief

The pertinence and agility of informal economies (i.e., vendors) in post-disaster situations.

(SOLUTION 3.19) Pilot Projects for Under Resourced Green Spaces

The Johannesburg department of city and parks have several thousand parks and green spaces and they are under resourced. It's also debatable what they did, but they have decided they want to focus on pilot projects and demonstration projects. They selected 20 or 30 of the parking public spaces and put the special attention on those ones and not to say that the others are completely neglected but they use those ones to develop pilot projects. One example related to climate change is the best valley park which is run by the community and supported by the department of park and zoo. This project was a job game generation; there was agriculture happening as well, so it was a showcase of a project that is very integrative. Their different sections and departments started to collaborate with each other and form into the departmental planning groups.

(SOLUTION 3.20) Urban Agriculture on Sidewalks

Another project was urban agriculture on sidewalks that is a very important because it's not like a classical park but it's the recognition that streets are also public spaces. There needs to be a need to adopt more urban agriculture which will then increase the social control and the atmosphere of the street. Even if we also focus on climate action and climate solutions everything needs to be integrated. The social and the environmental; and in Johannesburg you see they have been offering this type of job training. Just to address one aspect and only focus on that will create certain challenges and certain problems and there are always many side effects. If you have good public spaces in the city

that people could use and adopt, they don't have to be green; all of them a good public space is creating social resilience in the best case and then this social resilience this conveniently is also promoting climate action. It will be because the people build social capital and they start to collaborate and they start to communicate in a different way.

Urbanism: The Missing Link to Responding to Climate Change (UTC #5)

Lead Organizer: [Proactive Leadership Advocating for Climate and Equity \(PLACE Initiative\)](#)

Co-lead Organizers: [Congress for New Urbanism \(CNU\)](#)

Where: Global – Online

More INFO: <https://placeinitiative.org/2021-urban-thinkers-campus/>
<https://www.seattletimes.com/nation-world/u-s-announces-major-conservation-effort-but-offers-few-details/>
<https://hbr.org/2019/01/the-era-of-move-fast-and-break-things-is-over>
<https://en.wikipedia.org/wiki/Redlining>
<https://www.nlc.org/article/2018/03/01/5-local-housing-affordability-strategies-that-work/>
<https://plangreen.net/brave-new-us-housing-policy-place-initiative-presentation/>
<https://www.brookings.edu/policy2020/bigideas/to-improve-housing-affordability-we-need-better-alignment-of-zoning-taxes-and-subsidies/>



DESCRIPTION:

(SOLUTION 3.21) Think tank that is directly connected to national and subnational policy makers

Create a think tank that is directly connected to national and subnational policy makers, and that works to co-create, share information, and collaborate with both national and international partners around good practices in fields related to urbanism.

(SOLUTION 3.22) 30 by 30 and 50 by 50

30 by 30 and 50 by 50, which seek to protect and restore 30% of the land area by 2030 and 50% of the land area by 2050. In order for strategies such as 30 by 30 and 50 by 50, which seek to protect and restore 30% of the land area by 2030 and 50% of the land area by 2050, to be successful, they will need to involve some form of relocation of human settlement into more concentrated patterns that allow for land management strategies that center ecology and carbon sequestration with wildfire and flood hazard mitigation.

(SOLUTION #3.23) Timelines to Move Fast and Decarbonize

Transportation

Timelines must be set to motivate a speed of progress, motivated by a sense of urgency, that can push through inertia and business-as-usual mindsets to "move fast and break things" if needed, to deliver the necessary solutions in time to be effective. There is a need for rapid change to create more equitable, humane and decarbonized transportation systems to meet the accelerating challenges of climate change, loss of social capital (community connectedness) and rising inequality. Getting things done quickly will require building the tools, protocols and skill sets to expedite change, and identifying people with the authority to change the systems. Timelines must be set to motivate a speed of progress that can push through inertia and business-as-usual mindsets to "move fast and break things" if needed. At the same time, inclusive community engagement should inform this change. Collaborating with diverse community members can also break down resistance to change and build local champions.

(SOLUTION #3.24) Using Language to Build Partnerships for Just Transition

Identifying language is critical in addressing the redlining of the past, and how important it will be to build partnerships with other organizations to deliver a successful just transition.

(SOLUTION #3.25) New Creative Finance Strategies

Using creative finance strategies through nonprofit and for-profit channels to organize buildings with a mix of market rate, commercial, residential, and affordable options.

(SOLUTION #3.26) New Taxation Policies to Stop Subsidizing Homeownership

Taxation needs to be revised to stop subsidizing homeownership for those with least need --the top 30% in the income ladder and to end the financialization and commodification of housing. End all other tax credits, tax deductions and privileged treatment for capital gains and give the lowest income renters and homeowners a tax credit--making US tax policy progressive once again. Land Value Taxation should be coupled with policies that provide protection for low-income homeowners, so their property taxes remain based on purchase price + improvements + inflation, not on inflated gentrified neighborhoods.

A Local Green Deal (UTC #10)

Lead Organizer: Studieninstitut Rhein-Neckar (STIRN)

Co-lead Organizers: ISOCARP institute

Where: Global - Online

More INFO: <https://utc-mannheim.de/>, <https://utc-mannheim.de/event/urban-lab-16-2021/>, <https://www.migrants4cities.de/de/uber-das-projekt-2/>, <https://utc-mannheim.de/event/urban-lab-8-2021/>, <https://utc-mannheim.de/event/urban-lab-10-2021/>, <https://www.klima-ma.de/>, <https://utc-mannheim.de/event/urban-lab-7-2021/>, <https://utc-mannheim.de/event/urban-lab-3-2021/>, <https://utc-mannheim.de/event/urban-lab-9-2021/>, <https://www.wiese-wald-und-co.de/newpage>, <https://utc-mannheim.de/event/urban-lab-12-2021/>, <https://www.buga23.de/>, <https://utc-mannheim.de/event/urban-lab-13-2021/>, <https://www.stadtradeln.de/mannheim>

DESCRIPTION:

(SOLUTION 3.27) Mission Statement 2030 Framework with the Citizens of Mannheim

Developed a mission statement 2030 with the citizens of Mannheim and UTCs localizing the SDGs as a kind of mind opening to all the units and people in the city for a more holistic and integrated thinking. Stepped into an evidence-based policy discussion with the SDG indicators measuring the progress. To deliver through actions, the framework looks to identify the gaps in Mannheim from past and present experience. The framework for a local green deal states the community wants to have as a concrete monitor of action in Mannheim. This means a local green deal with the citizens with the companies: A collaborative deal that we say we all are responsible for a climate neutral Mannheim. Different fields like the sustainable energy, mobility and biodiversity and food systems have been identified. The goal is to get into concrete deals with the citizens but also with the companies by creating a Mannheim message on building local green deals in Europe. The vision is being shared so that other cities can follow. Currently, there are plans being created for mobility, heat adapter and zero plastic.

(SOLUTION 3.28) Green Zone: Green Belt in Mannheim

At COP 26 the mayor of Mannheim Dr. Kurtz formulated Mannheim wants to be climate neutral by 2030. This is a big game changer to say we want to be climate neutral in 2030 and not 2050 like other European cities which will be very hard to achieve. This goal would seem impossible two or three years ago but now it can be concrete for instance we turned a military area into a green belt of about 60 hectares. The theme of what is sustainable for the city of Mannheim. Mannheim is being changed it into a green belt where there will be a garden exhibition in 2023 with the big theme of the SDGs. There is also a plan on planting 60,000 trees this year. They are currently testing with citizens in their neighborhood what it means if the neighborhood is car free as the topic about cars and the parking places is very crucial in Germany. The goal is to create mind changers that are willing to test this to see what it looks like having no cars in your neighborhood for example.

(SOLUTION 3.29) Green Tech Startup Centers and Sustainable Education Programs

A green tech startup center has been created to have more startups in the green tech sector for those who are inventing solutions for green tech. There will also be more sustainable education programs in the in the kindergarten for regional food but also for avoiding waste. There are already programs that seek and acknowledge children for being a climate hero. They are also identifying the regional value chains and trying to get the industry more into the industry of a common good.

(SOLUTION 3.30) Plastic Strategy

With the mission statement 2030, Mannheim is setting out on the path to becoming a sustainable and future-proof city. Through its membership in the European city network EUROCITIES, Mannheim has committed itself, among other things, to developing and implementing an action plan for 2021 - 2022 to reduce plastic waste and prevent littering. The plastic strategy launches an open process that is to be supported and further developed by the citizenry and a broad spectrum of target groups. Over a two-year timeframe, new measures and activities will be continuously developed and implemented to reduce the consumption of short-lived plastic products and reduce plastic litter in the environment. In dialog with interested citizens and in exchange with experts, new solutions and approaches will be discussed and integrated again and again. Various forums and formats are used for this purpose.

(SOLUTION 3.31) Citizen Participation

In Mannheim, successful citizen participation is important for jointly shaping the city. That is why a set of rules for citizen participation was published in 2019. Since then, a wide range of participation opportunities have been continuously offered to the citizenry. People can actively use ongoing participation offerings on the participation portal. Through the 2019 participation budget, many ideas from the citizenry have also already been put into practice. Another highlight this year was the Spinelli Festival. On the BUGA 23 site, citizens were able to experience innovative urban planning on site and contribute their ideas and suggestions on the 17 SDGs in Mannheim. These ideas were evaluated and will be incorporated into the further work processes for the Local Green Deal. Particularly important issues for citizenship are a green and car-free city that ensures a high quality of life, as well as more opportunities and possibilities in the areas of education, volunteering and sustainable consumption.

(SOLUTION 3.32) Mannheim Mobility Master Plan 2035

With the Mobility Master Plan 2035 we would like to enable a sustainable traffic development of our city. The Mobility Master Plan 2035 is to include analyses and forecasts of traffic development and traffic effects, the formulation of goals, the identification of deficiencies and problems, the development of scenarios, and the elaboration of concepts for action and proposals for measures. All modes and means of transport are to be included, as well as the transport of people and goods. Innovative technological and organizational developments are to be considered and implementation possibilities for Mannheim are to be proposed. Mannheim residents will be involved in the process through various participation formats.

(SOLUTION 3.33) Climate Protection Action Plan 2030

With the creation of the Climate Protection Action Plan 2030, the City of Mannheim is launching one of the most important projects to concretize the strategic goal of climate neutrality from the mission statement "Mannheim 2030". The action plan will concretize the goals until 2030 and the way to a climate neutral city of Mannheim. A first milestone is the definition of greenhouse gas emission paths. These will be derived in the individual fields of action of Mannheim's climate targets. The targets are to be both ambitious and realistic. Throughout the process, there will also be a variety of

opportunities for participation.

(SOLUTION 3.34) Open space concept 2030

The competitiveness, sustainability and resilience of a city are also determined to a large extent by the supply of green and open spaces - and their qualities. The concept Freiraum Mannheim2 - Grüne Bänder, Blaue Ströme (Green Ribbons, Blue Streams) is a city-wide plan that formulates a vision for Mannheim's open spaces up to the year 2030 and is intended to provide impetus for sustainable urban development. In four action areas, concrete local issues and topics affecting society are addressed and explained in individual action concepts.

(SOLUTION 3.35) Creative Testing on Site

As part of Urban Lab 16, the project team of "Migrants4Cities" offered a two-hour city walk, during which the public space was explored together at various stations in Neckarstadt-Ost. Some of the highlights were the three spaces in Neckarstadt-Ost with the prototypes set up: Clignetplatz, Lange Rötterstraße and the square at Uhlandschule. There we temporarily closed the streets for the UTC for car traffic and placed furniture to sit on. The streets were now used for talking with neighbors, seizing the public space for leisure instead of sitting in the flats, playing of children, talking to neighbors etc. The ideas and their implementation were lively discussed during the walk, the prototypes were extensively tested and the feedback of the participants of the walk was recorded. In addition to smaller inputs on topics such as land use justice, heat stress, green spaces and urban trees, the walk also focused on trial and error and self-exploration with the help of small tasks. During the walk, individual steps of the Urban Design Thinking method, such as identifying needs (Observe & Define) or quickly developing ideas (Ideate), were incorporated and tried out. In this way, the participants were able to discover the district they were mostly familiar with from new perspectives and develop their own ideas.

(SOLUTION 3.36) Climate Protection and Consumption-Free Spaces

Together with the citizens, we discussed online in Urban Lab 8 and on-site in Urban Lab 10 the opportunities and measures for more climate protection in Mannheim in relation to the Local Green Deal and the Climate Protection Action Plan 2030. In Urban Lab 8, a more sustainable public procurement and more sustainable offerings for citizens. In Urban Lab 10, citizens were then

able to contribute their creative ideas to the Climate Protection Action Plan 2030. On the one hand, more green spaces and green lounges are needed in the city, as well as reduced sealing. Buildings also need to become greener and more energy-efficient, with the city also setting a good example. Mannheim should also develop into a bicycle city and public transport should be promoted more strongly. In addition to the free organic waste garbage can, sustainable consumption in the city should also be promoted, for example through vouchers at weekly markets. We need more flexible and resilient public space, which is consumption free, so that especially people who are living very dense in little flats can use them.

(SOLUTION 3.37) Innovative and Sustainable Urban Development

The Corona pandemic has made visible a change in the use of public space and revealed new demands on urban development and planning. Thus, the Leipzig Charter of 2007 was also revised once again in 2020. Here - with reference to the New Urban Agenda - equitable, green and productive cities were called for, characterized by good urban development policies. This includes high-quality public spaces that make the city more vibrant as places of encounter. The health and safety of citizens must be a priority. New ideas and approaches for urban public spaces were discussed in Urban Lab 7. The renowned architect and urban planner Prof. Elke Pahl-Weber discussed new approaches to urban planning with other experts. They called for a more humane approach to urban planning, including co-creation, where citizens are more involved in the processes. The use of digital formats in citizen participation and real labs as examples that make change and co-creation tangible are important here. Cities would need adaptable and sustainable public spaces that invite people to get together. In addition, the renowned urban researcher Charles Landry called in Urban Lab 3 for an end to silo thinking in the municipalities of the EU. More cooperation between municipalities is needed to learn from each other and more courage is needed for new and creative ideas in urban development. The City of Mannheim is doing justice to the changing use of public space by once again supplementing our "Mannheim 2030" mission statement on this point.

(SOLUTION 3.38) Tree Talks - A Strong Forest for Effective Climate Protection

A walk through the forest gave citizens the opportunity to get to know Mannheim's forest better and to learn about current developments and

challenges and why forests are so important for the climate and the citizens. The participants were able to contribute their ideas and wishes within the framework of the Urban Lab 9. There should be more actions for less waste and a broader education of the population about what the forest does for us and why forest protection and thus climate protection are necessary. This should also strengthen the emotional bond between children and the forest. The mixed forest should also be preserved in Mannheim.

(SOLUTION 3.39) BUGA 23 as part of the Local Green Deal

The National Garden Exhibition BUGA 23, which will take place 2023 in Mannheim, is also committed to the 17 sustainability goals, which have been made visible through 17 gardens of the future. Additionally, there will be shown solutions for regional food chains and climate neutral food production. Especially in the transformation of the Federal Horticultural Show grounds, the goals are to be the focus. Overall, the new BUGA 23 concept was very well received by the population in Urban Lab 12, for example through an upgrading of the neighboring districts. In addition, the importance of the BUGA for the urban climate as part of the green corridor northeast became clear, especially through a careful development of the site and a subsequent use of existing buildings. Finally, the new mobility concept was also positively evaluated.

(SOLUTION 3.40) The City Cycling Project to Implement the Local Green Deal

2.642 people took part in the “Stadtradeln” Action in Mannheim and drove by bicycle instead of using a car. The winners with the most driven kilometers were honored on our Action Day. Through the City Cycling project in Urban Lab 13, citizens were able to experience sustainable and climate-friendly mobility first-hand. Together with the Mayor, they explored the Federal Garden Show grounds by bicycle. Beforehand, the cyclists also had the opportunity to contribute their suggestions and ideas for more sustainable mobility in Mannheim. The cycling culture in Mannheim must be promoted. More covered parking spaces and greater safety for cyclists were suggested.

Adapting Cities for Climate Resilience: Amplifying Pakistan's Efforts and Young Voices to Echo at COP 26 (UTC #21)

Lead Organizer: Ministry of Climate Change and UN- Habitat - Pakistan

Co-lead Organizers: Comsats University, Islamabad

Where: Islamabad, Pakistan

More Info: [https://13b76e8f-1939-4110-a894-](https://13b76e8f-1939-4110-a894-ee362591ba6b.usrfiles.com/ugd/13b76e_5bf3f40705ca4a5b948a5dea17ac1a0b.pdf)

[ee362591ba6b.usrfiles.com/ugd/13b76e_5bf3f40705ca4a5b948a5dea17ac1a0b.pdf](https://13b76e8f-1939-4110-a894-ee362591ba6b.usrfiles.com/ugd/13b76e_5bf3f40705ca4a5b948a5dea17ac1a0b.pdf)

DESCRIPTION:

(SOLUTION 3.41) Rainwater Harvesting in Urban Areas

The impacts of climate change with rapidly growing urbanizing population are causing severe water shortages. Per capita surface water availability has declined from 5,260 cubic meters per year in 1951 to around 1,000 cubic meters. This quantity is likely to further drop to about 860 cubic meters by 2025 marking Pakistan's transition from a "water stressed" to a "water scarce" country. The minimum water requirement to avoid food and health implications of water scarcity is 1,000 cubic meter per capita per year. Shehersaaz is going to launch three years rainwater harvesting project with UN- Habitat Pakistan in district Nowshera and Rawalpindi with financial support of Adaptation Fund. Although rainwater harvesting techniques are very rare in Pakistan but this demonstration will cost effective solution to adapt to both floods and drought.

Wamama Tunauwezo 6: Women Have Power (UTC #22)

Lead Organizer: Huairou Commission

Co-lead Organizers: Polycom Development Project

Where: Global - Online

More INFO: <https://polycomgirls.or.ke/>

DESCRIPTION:

(SOLUTION 3.42) Spaces for Women to Impact Climate Change

There was a physical abandoner's campus in a place called Roland camp in Nairobi Kenya which is a small forest that served to connecting women and communities with nature and getting people to understand that it is possible to plant trees and conserve our environments ahead of the urban figures. There were community events around women claiming their neighborhoods and identifying a space to collaborate, clean up and educate. The spaces the subspaces for collaboration will serve to bring communities together to talk about the successful programs that have worked in the past. Spaces bring together experts on climate change and local communities to show what they have been doing and what is working well. One example is of women in an organization called Mazingera. They were able to plant over 500 fruit trees within Kibera as well as doing recycling work as an organization.

(SOLUTION 3.43) Collective Community mapping to address vulnerability and empower authorities

It's only within the communities that you can get real data where you don't have those assumptions in fact at times. It's only from the community that we can achieve and address the realities faced as a city. The goal has been to compile the data available and work with the authorities to launch reports and use different platforms to disseminate them. Actions also involve monitoring actions being taken in the community so that there is inclusion and collaboration in the community generated data.